

**International Education**

JOHN A. HANNAH

**Dynamics of Distribution Channels**

ELI P. COX, JR.

**Those Economic Forecasts**

DANIEL R. FUSFELD

**Energy and Raw Material Requirements**

PEDRO C. M. TEICHERT

**The Variable Annuity Controversy**

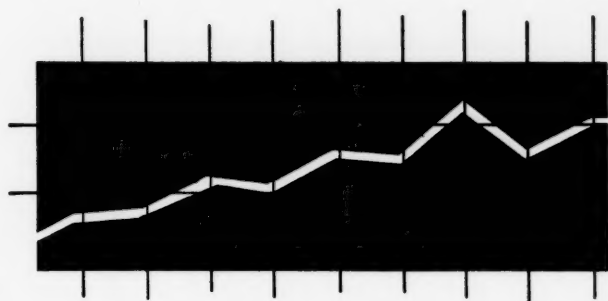
R. F. SALMONSON

**Current Business Conditions**

JOHN H. HOAGLAND

# BUSINESS TOPICS

*Volume 6 Number 2 September 1958*



*Bureau of Business and Economic Research  
College of Business and Public Service  
Michigan State University*

# BUSINESS TOPICS

*"Let your discourse with men of business  
be short and comprehensive."*

*George Washington's Copybook.*

*Vol. 6 September, 1958 No. 2*

Business Topics is published bi-monthly by the Bureau of Business and Economic Research, College of Business and Public Service, Michigan State University, East Lansing, Michigan. Opinions expressed in articles are those of the writers, and do not necessarily represent the editorial point of view.

*Dean of the College*

ALFRED L. SEELYE

*Director of the Bureau*

ELI P. COX, JR.

*Bureau Economist*

JOHN P. HENDERSON

*Associate Editor*

ANNE C. GARRISON

*Research Associate*

JOHN L. O'DONNELL

*Research Assistants*

NASER G. BODIYA

A. COSKUN SAMLI

DAVID I. VERWAY

*Secretary*

JUDITH A. THOMPSON

*Clerical Staff*

ESTHER MARLATT

JOAN ROOBOL

DIANA WILLIS

*Bureau Advisory Board*

STANLEY C. HOLLANDER

NORMAN MARTIN

DALTON E. MCFARLAND

VIRGIL D. REED

ROLAND F. SALMONSON

MILTON C. TAYLOR

Permission to reprint material appearing in *Business Topics* will be granted upon written request addressed to the Bureau of Business and Economic Research.

Published as a service of Michigan State University for all those interested in business and economic matters. Entered as second-class matter at the Post Office at East Lansing, Michigan, on June 10, 1953, under the authority of the Act of August 24, 1912, as amended by the Act of August 4, 1947.

# INTERNATIONAL EDUCATION

Address by President John A. Hannah  
Summer School Convocation  
July 1, 1958

A TOPIC AS BROAD as the one assigned to me today confronts a speaker with tempting choices. He may wander about in a wide field of generalities, thus happily avoiding any specifics, or he may confine himself to a single aspect of the situation where he professes to have some competence, and thus happily avoid controversy and challenge from those who may know more than he about some other phase. Neither course of action would be appropriate to this time and audience. The best course may be to touch upon a few aspects and hope, not to provide final answers, but to stimulate thought and provoke discussion during the period you are on the campus for summer classes.

Let us begin our discussion then by narrowing the topic to something like "Education for the World of Today and Tomorrow". This is an aspect of international education which should be of interest whether you are students working towards your first degrees, or teachers taking a respite from teaching by being students again.

Education at all levels has been under critical scrutiny in recent months as the aftermath of our belated awakening to the accomplishments of Soviet science and technology, and it seems certain that some revisions in methods and curricula must result. But such revisions are not at all likely to restore our relative competitive position unless we awaken also to the fact that it is no

longer enough to educate boys and girls and men and women for the world of yesterday.

Time was when that approach was adequate, because students were likely to live out their lives in a world not far different from the one into which they were born. But beginning early in this century, the tempo of change, which traveled at a leisurely pace throughout much of history, began to pick up speed. When one hears informed scientists talk in matter-of-fact phrases about some of the marvels they see just ahead, the dimensions of the problem of preparing young people to live in the year 2,000 and beyond are formidable indeed. And many of you will still be vigorously working 42 years from now in the year 2,000.

## THE NEW FACTS OF LIFE

Today we will not attempt to decide how education at all levels should attack and master this problem. Instead, we shall look at some facts which impel us to certain decisions almost as radical in their implications as preparing men to fly to the moon or to look to harnessing the sun for the energy required in tomorrow's world after man has fully used our water power resources and the sun's stored energy in coal and oil and other sources.

A fact of life, of which many Americans are not yet fully aware, is that the United States is permanently and irrevocably committed to an active interest in the affairs of peoples and nations throughout the world. Isolationism dies

---

DR. HANNAH is President of MSU.

slowly, even in the face of facts, and there are still those among us who would have us withdraw behind our ocean barriers and let the rest of the world go hang.

It is disturbing to see that even among those who have accepted intellectually the necessity of our involvement with people and nations everywhere in the world there is a continuing reluctance to lift their vision beyond our own country, our own continent, and Western Europe. We still are hypnotized by domestic events, and those in France, the British Isles, Germany, Italy, and the Scandinavian countries. We read, hear, see, and think too little about Central and South America, the Middle East, Asia, and Africa. Yet those are the areas in which the future is being shaped to an extent that should alarm all of us and stir us to action.

Let us draw up a bill of particulars on this point. We study the history and the literature of Western Europe in our colleges and our schools, but pay precious little attention to the history of the rest of the world. We are not conditioned to think of the peoples of Asia and Africa in the same manner as we do of the peoples of Western Europe from which our ancestors came.

And the languages we teach: they are principally English and the languages of Western Europe—French, German, Spanish, and Italian—and in most of our high schools only French or Spanish. A very few elementary schools have been so daring as to inaugurate the teaching of foreign languages where they should be started in the early grades. But I have yet to hear of one high school offering Arabic, despite the rising tide of Arab nationalism; or Russian, despite the fact that Russian-speaking people are aspiring to world domination; or Chinese, despite the ominous threat of Communist China to the security of the allied world; or Hindi, despite the strategic role India is destined to play in world affairs. True, colleges and universities are offer-

ing instruction in these and other languages. There is too great an inclination on the part of elementary and secondary school educators to disclaim responsibility, despite the well-known advantages of launching language study at an early age. Here is an area in which today's youngsters have a considerable interest. They know better than their elders that their world grows ever smaller and that skill in a foreign language can be an abiding asset through life.

What is true of language offerings is equally true of the study of the history, literature, economy, religions, and art of these countries which lie beyond our current range of vision, if not beyond our realm of interest. This is to be expected, language being the key to understanding.

The cry will immediately go up that our schools have neither the room nor the time for such additions to their standard curricula. Sympathizing fully with the difficulties faced by our schools in their efforts to educate all educable children, we still can reflect that schools in many countries in Europe somehow find time to include four or six years' study of English or some other foreign language in their curricula without sacrificing the basic subjects.

#### COLLEGE LEVEL AND BEYOND

Colleges and universities, too, could do far more than they are now doing in teaching the language, culture, and history of foreign lands. But it seems fair to observe that colleges and universities traditionally serve students in subject matter areas in which the elementary and secondary schools provide the basic, fundamental instruction, or stimulate the interest that leads to college study. As a consequence, college instruction in many of these areas is not of the caliber, and cannot be, that might be expected if the foundations were well laid in the students' earlier years. This is an area that might yield fruitful results if teachers and adminis-

trators from the elementary, secondary, and college levels were to get their heads together to see what could and should be done.

Nor should adults long past the age of formal schooling be left out of our consideration. It is among these Americans, voters all, that we find the greatest ignorance—or to put it more kindly, the least understanding—of the world situation today and the tremendous achievements America must accomplish if she is to meet the challenges of the times.

Vice President Nixon emphasized this point a few months ago in answering questions at a meeting in Denver, over which I happened to be presiding, dedicated to improving technical assistance programs overseas carried on by American universities. He was asked why it is so difficult to convince certain congressmen and other political leaders of the worthwhileness of technical assistance programs abroad. He replied:

How do congressmen and senators reach conclusions? What do they represent? Generally speaking, a congressman or senator is no better and no worse than the majority of the people in his district. Basically, this is not simply the education of congressmen and senators; it is the education of the public at large. Educating the public at large in a field like this is somewhat difficult. But I must say that I think we, at the national level, must do a more effective job. I think that the people who are sophisticated in this field at the local level, like yourselves, can do a more effective job . . .

At another point in the discussion, the Vice President pointed out the difficulty in recruiting able people who are willing to make the sacrifices overseas service with a technical mission may entail. He suggested that the educators present help to create in the country at large a realization of the tremendous importance of this program.

Service in this program, he said, is just as important as service in time of a shooting war.

International developments in recent months emphasize the truth of this observation. It is becoming increasingly apparent that the Communist bloc is waging an aggressive economic war against the allied nations, seeking thereby to win over to their side those countries which have not as yet finally decided which road to follow in working out their national destinies. There is hope in this situation if it means that economic warfare has been chosen as the alternative to shooting war, but we must not forget that the stakes are the same, that the masters of the Kremlin still have as their fixed objective the domination of the whole world. In the long run, to be conquered by economic warfare is no less disastrous than conquest by military weapons.

#### EDUCATION FOR TECHNICAL ASSISTANCE ADMINISTRATION

Those of you who are seriously concerned about this situation—and all of us should be—will find a penetrating, dispassionate analysis of the situation in the current issue of *Business Topics*, published by our MSU Bureau of Business and Economic Research. The article is written by Jahangir Amuzegar, an assistant professor of Economics, under the title "Technical Assistance Diplomacy". Dr. Amuzegar is a native of Iran and writes from a somewhat more detached point of view than many American commentators. I commend the entire article to you, but I would like to cite the points he makes concerning the handicaps under which this country works in its technical assistance programs in other lands.

He points out that whereas we concentrate our efforts in the fields of agriculture, health, and education where results may be slow in coming and are seldom visibly spectacular, the Soviet activities are concentrated in industrial and capital improvement projects which

are easy to recognize. By so doing, the Communists capitalize upon the symbolic desires of countries just emerging from colonial status.

This pertinent observation throws an interesting light upon the preoccupation of Soviet education with science and technology. They are educating scientists and technicians in great numbers, not only to be used in the military organization and domestic economy, but also for export to foreign lands which they hope to tempt into the Communist orbit. Presumably they agree that those of their citizens who go out on these missions are serving just as importantly as they would serve in time of war.

But more to the point of our discussion this morning, Amuzegar points out the difficulties Americans have in adapting themselves to local conditions. Economic and pecuniary factors often motivate those Americans who choose to serve overseas; generally, in the words of Dr. Amuzegar, "they are unable to speak the native language or appreciate local customs . . . In some cases they also suffer from the fault of their virtues; they are impatient with the slow tempo of life in the host countries; they get annoyed by, and complain about, certain official procedures and practices at home and abroad."

Then he goes on to say: "The competitive advantage of the Soviet bloc, by contrast, is in the cultural heterogeneity of its population and the background and temperament of its experts. Multi-racial in its ethnic texture, the bloc is able to send abroad technicians who enjoy close cultural, religious, or psychological ties with the people they are sent to help. . ."

The author cites many other factors to be taken into account, and is generally optimistic concerning the chances of our country and our allies because of our superior resources. But in this one section to which I have alluded, he paints with delicate strokes a bold,

striking picture of the task confronting education in this country if we are to prepare people adequately to fight the economic war efficiently, effectively, and successfully, or to live in the world of tomorrow. It is a challenge to which education must face up with courage and determination.

Testimony as to the size and importance of this responsibility abounds. Take, for example, the report of Finis E. Engleman, Executive Secretary of the American Association of School Administrators, who served as chairman of the United States delegation to the 20th International Conference on Public Education in Geneva, Switzerland. He tells of the intense interest on the part of other delegates in the American educational system, and then he writes:

. . . at the risk of appearing to be sensational, I wish to recommend that through whatever media seem proper, the people of the United States be alerted to the fact that the cold war on the political, the ideological, the social, and particularly the economic front, can be lost unless the U.S.A. husbands its human resources as well as its physical ones. Our national strength in the future, as has been true in the past, depends upon an ever improving and ever extending education system. We are more likely to be beaten to our knees through lack of (a) technical power, (b) economic productivity, (c) specialists in interpreting cultures, (d) linguists, and (e) diplomats, together with general ignorance among our citizens of a kaleidoscopically changing, shrinking world, than we are to be defeated by military might. We shall stand or fall on our ability to compete worldwide in these areas of human competence.

Accumulated testimony indicates clearly the imperative necessity of ridding the American educational establishment, from kindergarten through the

graduate school, of intellectual isolationism and cultural provincialism. This must be done to the end that the American citizen of the near future, be he leader or follower, will take an active interest in world affairs and be sympathetic to the legitimate aspirations of those in foreign lands, responsive to the cultural contributions they have to offer, and understanding of the role each nation, each people, each culture has to play in the development of the destiny of all mankind.

As Adlai E. Stevenson said in his commencement address on this campus a few weeks ago:

To know more about the world has become a condition of survival. By survival I don't mean only from violent death, but rather from the slow, lingering extinction of all we Americans are and mean as a people.

#### THE ROLE OF THE UNIVERSITIES

It is to the eternal credit of American colleges and universities that from the very beginning of our technical assistance programs, they have given willing and effective support to them. I recall with pride writing to President Truman soon after he had enunciated his famed Point Four program to offer the complete support and cooperation of the land-grant colleges and universities, in themselves a great and self-replenishing reservoir of the information and the talents to make such programs work. It is cause for even greater pride to recall the tremendous contributions they have made to industrial progress, health, and the welfare of humanity in all parts of the world in the intervening years.

Michigan State University itself has done its full share. As many of you know, we sponsored the establishment of the University of the Ryukyus on Okinawa on the pattern of the American land-grant college and continue a cooperative relationship with several of our faculty stationed there; we have

participated actively for many years in cooperation with the government of Colombia in the development of agricultural colleges in Medellin and Palmira; we are supervising a pioneering program in business administration in Sao Paulo, Brazil; we are operating the largest overseas program carried on by any American university in South Viet Nam; we are undertaking an extensive project in cooperation with the Ford Foundation in Pakistan; and we now have under consideration a project which may lead to the establishment of a new university in East Nigeria in cooperation with that local government and English universities.

These projects are cited, not to claim credit for Michigan State, for other institutions have done their share too, but to illustrate that there is a tremendous appetite for education, American style, in the far corners of the world. These people are persuaded by the facts of history that the tremendous achievements of this country, industrially, culturally, politically, and socially, have some of their strongest and deepest roots in the system of education that is unique to this country. They have weighed the advantages of other systems, which provide educational opportunities of high quality for the elite few, against the advantages of the American system, which promises quality education for the many, and have chosen to follow our pattern. They look to education to lead them out of the wilderness of ignorance, prejudice, and intolerance in which they have lived for so long, onto the high road which leads to better things for more people. Their confidence that education can perform miracles for them, childlike at times, is a tremendous tribute to us as a people, and at the same time an imperious demand that these miracles be performed. My hope and prayer is that all of those in whom this confidence is placed will prove fully worthy to hold it. That we have the underlying technical skill to perform

these miracles there is no doubt. That we have the courage, the persisting strength of national character required, and the dedicated personnel, remains to be seen. It is almost a certainty that the United States will not measure up to these eager expectations, and reap resentment as a consequence, unless we try some new approaches to the problems involved. Some of these have been suggested: A great expansion in our foreign language problems at all educational levels; creation of opportunities for those from other lands to give us from their cultures that all may be enriched; active programs of adult education in world affairs intended to eradicate the isolationism which is a legacy from our ancestors who fled to the United States as a refuge.

#### THE NEEDED REORIENTATION

But we need to do still more. What we need, in general terms, is a reorientation of American education to produce both the specialists who are fully qualified to serve the national interest in overseas posts of responsibility, and a national attitude of mind and spirit that will serve as a solid foundation for a fully effective program of helping other countries help themselves. This is a struggle that will be won, not on a battlefield, but in the hearts and minds of men. Everywhere in what we call the under-developed or under-privileged countries of the world, there is a burning thirst for knowledge. Professor Richard Nolte of the American Universities Field Staff, who recently returned after several years in the troubled

Middle East, commented that it is the United States, not Russia, that the Arabs look upon as the ideal political and social system after which they would like to reconstruct their own.

The outcome of the basic struggle which will continue to be waged by the Soviet Communists to gain control of the third of the world not now committed either to our basic philosophy or to theirs will in the long run determine not only the course and pattern of world history but the kind of America our children and grandchildren will live in.

What most of those countries seek is not charity, or handouts, but some of the opportunities for self-improvement and development we Americans have enjoyed in such great abundance, and they look upon education as one of the most reliable means of achieving their legitimate ambitions.

If you agree that this is both an opportunity and challenge for America towards which these nations look with hope, then think about these things in the weeks you are on this campus, and the months and years to come. You who are enjoying the benefits of our unique educational system will be among the leaders in forming public opinion and shaping public policy in the years immediately ahead. You should be among the ardent advocates of proposals intended to help less-privileged countries lift themselves to higher levels. In so doing, you will be advancing, not the narrow interests of our country alone, but the broad interests of all mankind.

# Dynamics Of Distribution Channels

BY ELI P. COX, JR.

*An analysis of some of the factors which contribute to the evolution of marketing institutions.*

A distribution channel is the institutional route through which a product reaches its ultimate user. It is made up of the institutions through which the title of a product passes on its way from the producer to the consumer, plus any functional middlemen, such as selling agents and brokers, who may facilitate the transfer of title without ever assuming title themselves. While functional middlemen technically do not appear in the channel, no definition would be complete that did not include a reference to them.

The shortest distribution channel is one in which the producer of a product sells it directly to its ultimate user. Theoretically, there is no maximum length, although those containing more than four or five elements are rare. Neither is there any generally established optimum channel length, despite the claims of manufacturers who sell to consumers by door-to-door or other direct methods. About the only generalization which can be made is that, in a given selling situation, the most efficient channel is the one in which the sum of the marketing costs of the institutional components is least. This generalization is as obvious as the one about how long a man's legs should

be. The answer, of course, is that they should be long enough to reach the ground.

Probably no two fallacies lead to more misunderstanding of the nation's distributive system than the following: that short channels obviously afford greater marketing efficiency, and that distribution channels are static. Nothing could be farther from the truth. If short channels were invariably superior, all producers would sell directly to ultimate consumers, and static distribution channels would require a complete absence of competition and institutional mortality.

In a competitive economy buyers and sellers generally have a number of alternative choices between various sources of supply and distributive combinations. If the alternatives are not adequate, this fact in itself calls into being new institutional types to fill the need. Needed developments in distribution channels will inevitably take place in the long run.

The channel or channels to be used are determined by the seller's best judgment concerning the advantages of the alternative routes available to him for the sale of a particular product to a particular customer type at a particular time. A manufacturer of consumer goods may, at a given point of time, use one channel to reach large-scale retailers, a second to reach other metropolitan area retailers, and a third to reach retailers in less densely populated areas.

---

DR. COX is Director of the Bureau of Business and Economic Research, MSU.

The seller's decision to sell through the three channels to the three different customer types may be based on a delicate balance of advantages and disadvantages which could be upset by changes in the relative efficiencies of the channels. A change in the business practices followed by institutions which handle his goods or a change in the services they render him might have the same effect.

Similarly, changes in the producer's selling methods and practices might cause the marketing institutions which have been handling his goods to find it profitable to look elsewhere for a source of supply. Changes in the relative strength of the various institutional elements also must inevitably influence the ultimate form of the channel.

It is not meant to imply that business executives are immediately able to detect shifting advantages of alternative institutional combinations or that they eagerly welcome change. Since such relative advantages are difficult to measure, and since it is easier to continue old relationships than to develop new ones, resistance to change is almost as strong a force in a competitive economy as change itself.

Changes in channels are usually evolutionary, not revolutionary. They take place gradually, over a period of time, as a result of a great many small decisions made by myriads of buyers and sellers. The advantages of new alternatives must prove themselves, perhaps over a period of years, before they are generally accepted.

The tendency of distribution channels to resist change is as natural as change itself. It is always easier to follow old routines than to develop new ones. The fact that a certain channel has been used for a long time makes it traditional. The institutions in the channel are accustomed to working together, have adapted themselves to each other, and understand each other. Transactions between them have be-

come routine. Formal and informal rules, which all the parties understand, have been established and are generally followed. The various elements in the channel have confidence in each other and know from experience what kind of behavior can be expected from each other. The teamwork growing out of long association tends to make a generally accepted channel function like a single integrated institution.

Resistance to change in the distribution channel is also generated by the efforts of institutions involved to protect their own interests whenever they appear to be threatened. This resistance may take form in an attempt to meet the competitive advantages of new institutional types, or it may involve an effort to impede the progress of such institutions by sponsoring restrictive legislation. Regardless of the form which resistance may take, it is obvious that new institutions and new channels must prove themselves in order to survive. Unless they offer real economic advantages, they are likely to be still-born.

If a new institutional type is successful, existing institutions are likely to modify their own operations in an effort to obtain the advantages of the new type. This can be illustrated by the adjustments made by existing types of retail stores to the challenge of the discount house in recent years. If there is any adage which describes competition between marketing institutions today, it is the old one which says "if you can't beat 'em join 'em." Since the new institutional type is also likely to adopt features of the old, it eventually becomes difficult to tell the new and old apart. This has certainly been true in the competition between chain and independent retail stores, and appears to be happening in the franchised dealer-discount house rivalry.

A realistic picture of the status of distribution channels, then, is one of entrenched institutions which are being used by buyers and sellers who at the

same time are considering alternative methods. At any given moment, thousands of retailers may be buying through certain wholesalers while considering the possible advantages of buying through wholesalers of other types or directly from manufacturers. At the other end of the channel, thousands of manufacturers may be selling through service wholesalers and at the same time be weighing the advantages of alternative methods of reaching either retailers or the ultimate consumers themselves.

#### HISTORICAL DEVELOPMENT OF DISTRIBUTION CHANNELS

During the Middle Ages distribution channels in the modern sense were practically nonexistent, at least as far as domestic trade was concerned. Manufactured products were produced by handicraft methods and sold directly to local consumers. Agricultural producers generally had access to local markets only. The lack of an inter-market system sometimes led to gluts in some markets while famine existed in others.

Buying and selling usually took place at intermittent markets and fairs, at which producers dealt directly with consumers. Such practices as "fore-stalling" (buying outside the established market), "regrating" (buying goods in the market and reselling them,) and "engrossing" (buying up enough of a product to control local supply) were forbidden by law. Bans against these practices gradually broke down, however, and by the time of the Industrial Revolution the system of trading through intermittent markets and fairs had largely given way to a wholesaler-retailer system.

In the early stages of industrial development in the United States, the wholesaler was the dominant factor in our economic life. He assembled the produce of small shops and new factories and provided the mechanism for feeding it into the hands of small,

widely scattered retailers. Vast markets were not required at this stage, since the possibilities of decreasing unit costs of production were still relatively small, and since the costs of transportation necessary to reach a wide market probably more than offset any production economies of scale available to small producers.

The Industrial Revolution made the widening of markets necessary, however, since mass production required mass markets. As local producers mechanized their operations and expanded their volume of production, they were forced to find more and more distant outlets for their goods. This need led to the further development and specialization of middlemen as production increased in both volume and variety.

As new technologies made further expansion of production possible, and as the high fixed costs of large scale factories made full utilization of productive capacity more and more important, markets had to widen further. This need for mass distribution, together with growing population and effective demand, paved the way for the mass distributor who was to become the manufacturer's rival for economic power.

Every technological development has affected the demands made on the marketing system and generated change in its structure. The development of rapid, low cost transportation has led to wider markets and regional specialization, and has created needs for institutional adjustment or the development of new institutional types. Improvements in methods of communication, record keeping, and inventory control have made it possible for producers to extend their operations toward the final buyer, and for retailers to extend their operations back up the marketing channel. The pace of change, relatively rapid since the Industrial Revolution, shows no sign of abating. The rivalry

of the large-scale manufacturer with the large-scale retailer is also likely to continue, with the manufacturer endeavoring to control his distribution channels by such practices as product differentiation, national advertising, and the regulation of marketing margins; while the retailer strives for more channel control by buying unbranded goods, putting his private brand on them, promoting them, and establishing lower retail prices.

#### FACTORS INFLUENCING CHANNEL SELECTION

It seems appropriate at this time to consider some of the factors which influence a manufacturer in the selection of a marketing channel through which to sell his goods. While he cannot use a channel unless the institutions which make it up are willing to handle his products, the final decision in channel selection rests with the seller, and will continue to rest with him as long as he has the legal right to choose to sell to some potential customers and to refuse to sell to others. For this reason, the considerations involved in channel selection listed below are presented from the point of view of the producer of goods.

In considering the factors which influence channel selection, it seems logical to list them under three main headings: factors concerning the seller, factors concerning the product, and factors concerning the available channels. A fourth heading, factors concerning the market, suggests itself. It is not included, however, because the main factor under such a heading would appear to concern the nature and extent of the market. This factor surely is related closely to the other factors, and a detailed breakdown would tend to be redundant.

The listings below are intended to be suggestive, rather than exhaustive.

#### *Factors concerning the seller*

In thinking about distribution channel selection, one might ask himself why it is that two competitive manufacturers seems to find it to their best interests to sell practically identical products through different types of distribution channels. Since their products are similar and since they have the same institutional outlets available to them, why do they not find the same channel to be most effective in marketing their products? The answer is likely to be that there are internal differences between the competitors which cause them to have quite different requirements. Some possible internal factors influencing channel decisions are:

1. The seller's size.
2. The width of the seller's product line.
3. The degree to which the seller's productive facilities are concentrated or dispersed.
4. The degree of seasonality of production.
5. The seller's financial resources.
6. The seller's optimum scale of operation.
7. The kinds and amounts of services the seller expects to provide.
8. The forms of co-operation the seller requires.

A difference between sellers in one or more of these characteristics results in different distribution channel requirements. Significant differences may result in the use of entirely different channels. Until sellers are identical internally, there will be no single "best" channel. Since they are unlikely ever to be identical, there probably always will be room for different distribution channels carrying the same product types. No single channel is likely to fill the requirements of all sellers in a product field.

#### *Factors concerning the product*

The factors listed below help to explain differences between distribution

channels by product type. They indicate that not only the seller, but also the product itself, makes certain demands on the distribution channel which carries it. Since differences between products may require different methods of sale, these factors may help to explain the use of several channels by a producer of dissimilar products. Some of the product factors which may be influential in distribution channel selection are:

1. The degree of perishability of the product.
2. The degree of competitive importance of branding.
3. The unit value of the product.
4. The degree of public acceptance of the product.
5. The importance of servicing and repair.
6. The degree of competition with substitutable products.
7. The product's status as a convenience good, a shopping good, or a specialty good.

It is obvious that the degree to which dissimilar products differ in these respects may account for the use of different channels by their producers. It may not be so obvious that the degree to which similar products differ in these respects may also account, at least in part, for the use of dissimilar channels for the distribution of products of the same generic type. This can be illustrated by pointing out that a producer whose brand is a household word may be in a position to use almost any channel successfully, while the producer of a relatively unknown brand of the same generic product might be forced to limit his choice to a smaller number of possible channels.

#### *Factors concerning available channels*

In selecting a distribution channel, the seller must consider not only the difference between the channels themselves, but also how these differences dovetail with the peculiarities of his in-

ternal factors and the requirements of his products. Some distribution channel differences (differences in the marketing institutions which make up the various distribution channels) he would consider are:

1. Differences in typical quantities of purchase.
2. Differences in services they will perform.
3. Differences in costs involved in selling to them.
4. Differences in discounts necessary to cover their costs.
5. Differences in sales volume obtainable through them.
6. Differences in channels used by competitors.
7. Differences in the markets they serve.

These factors, like those of sellers and their products, are subject to constant, gradual change. As marketing institutions adapt themselves to changing economic conditions, to competitive moves of other institutions, and to other changes in the business climate, differences between them may be reduced or accentuated. Sellers may modify the distribution channels they use to the same extent that these adjustments take place within the marketing institutions which make up the various channels.

#### FACTORS INFLUENCING STRUCTURAL CHANGE

The force of competition is one of the most powerful stimuli giving impetus to structural change. Operating through the pressures of costs and prices, and through all kinds of non-price practices, it forces business concerns to be searching continually for better ways to do things: for more efficient production methods, for more effective marketing practices, and for new ideas which will give them a competitive advantage over rivals for the consumer's favor. A different institu-

tional combination of marketing functions may result in greater channel efficiency. Whenever the new functional combination has been tested in the crucible of competition and found to be more efficient, producers begin to shift their institutional arrangements. As this happens, competitive marketing institutions make whatever adjustments are necessary to meet the new threat, and additional institutions of the new type begin to appear on the scene.

Changing concepts of competition may affect administrative decisions in regard to pricing and margin policies. Shifts of emphasis in either direction between price and nonprice competition may cause changes in distributive practices and in the institutions which carry them out.

Population changes of all kinds are potent forces causing institutional adjustment. Changes in such population characteristics as overall size, rate of growth, educational status, geographical movement, geographical density, family size, and age distribution all exert powerful influences on the kinds of products which can be sold, the quantities in which they can be sold, and where they can be sold. When significant population changes are accompanied by important changes in personal income and its distribution, all the elements in the distribution channel are forced to reorient themselves. The continued success of an institution or an institutional type may hinge upon its willingness to make such adjustments quickly.

Improving production technology forces institutional adjustments by exerting pressures for spatially wider markets. Improvements in transportation and communication make these wider markets feasible from the point of view of efficiency. Improvements in administrative techniques encourage both wider markets and a greater degree of vertical or horizontal integration of business organizations.

Product changes exert pressures on institutional adjustment. Changes in product design or packaging require new methods of selling, transporting, and storing. Changes in the degree of public acceptance of products cause producers to reconsider distribution policies. Changes in degrees of product differentiation or standardization have the same effect. Changes in the volume and variety of goods make new demands on distribution channels and their institutional components.

A final force operating to cause structural change is that of governmental regulation of business practices. While it might be argued that such regulation usually is designed to prevent structural change, that much of it is designed to preserve the institutional status quo, it is also a fact that it is enacted to prevent practices which are in current use. Not only are these practices in current use, but they are of sufficient competitive importance to cause institutional types not benefiting by them to demand that they be banned. Whether such practices result in greater marketing efficiencies has nothing to do with these demands, since threatened institutions are more interested in their own survival than in such abstractions as the long-range efficiency of the economic system. Unlike the other forces discussed, government regulation does not necessarily result in increasing the efficiency of marketing institutions. It may be aimed at protecting competitors rather than at protecting competition.

Even when government regulation is motivated by a desire to prevent undesirable trade practices and to stimulate "fair" methods of competition, the results obtained may be different from those intended. Legislation with a general application may be enacted to curb the practices of a certain distribution channel or of a certain institutional level in the channel. The complexities of the economic system impose the requirement that those who pass rules to regulate the system in order to make

it function more effectively have at least a basic understanding of how it works, yet legislators are not required to have training in economics.

Legislation enacted in one era usually remains in force until it is replaced by other legislation. In later periods it may be construed by courts or administrative agencies to apply to practices which were not considered by backers of the original bills. It may be applied to situations which did not even exist at the time of enactment. The effectiveness of even the best regulations, then, hinges on their being adjusted to changes in the economic climate.

Government regulation of trade practices brings about structural change to the extent that business institutions modify their operations in order to conform to the new rules. Each new piece of regulatory legislation not only declares certain practices illegal, but also casts a doubt on borderline practices, the legality of which can only be determined by the courts. Cautious business managements may then refrain from using not only those practices which obviously are covered, but also those which fall within broad borderline areas. If this is the case, the adjustments may be even greater than those intended by the sponsors of regulatory legislation.

## Old 999

If you asked the proud winner of a pushmobile race why his home-built car had 999 painted on the hood, he probably wouldn't know: just a good number for a racer, he'd figured. His father, who painted it, could tell you of Barney Oldfield's racing car, 999, which set a speed record for the mile in 1911, with Henry Ford at the wheel. This car is now in the Henry Ford Museum in Dearborn.

To get all the way back to the original 999, however, you would have to tap the memory of the boy's grandfather or great-grandfather. On May 10, 1893, when the reminiscent oldster was himself at the age when the idea of speed is the most intoxicating, a great locomotive set a record that was to stand for many decades. On the flat stretch between Batavia and Buffalo, New York, the Empire State Express reached the thunderous pace of 112.5 miles per hour. Pulling the de luxe passenger train was Number 999, a locomotive deliberately built with one idea in mind: to break the speed record. For this purpose it was furnished with huge driving wheels, 86" in diameter, that gave it its tremendous speed but sacrificed some of the pulling power a working locomotive would need.

Demonstrating that the 112-mile rate was no lucky accident, the driver, Charles Hogan, held the express at that speed, throttle wide open, for six rocketing minutes, and barrelled his engine to permanent fame.

Our ten-year-old driver may hear of this memorable run from a grandfather who saw the train go by. To see Old 999 herself in honored retirement, he can persuade his father to take him to one of the special fairs or pageants in which she periodically appears out of her honored retirement in the engine terminal at Selkirk, N. Y.

#####

## WATCH YOUR LANGUAGE

#####

### *No Cats and Dogs?*

THE NEW YORK STOCK EXCHANGE'S brochure, "The Language of Investing", published last September, is a concise vocabulary of terms used in the investment world. Not only does the booklet make most enjoyable reading, with its highly-flavored terminology reminiscent of the idiom of many different eras, but a check-through of the technical glossary provides a good test of one's own familiarity with the field.

The temptation of course is to look for words that might have been included and were not. The colloquial *penny stocks*, *bucket shop* and *blue sky laws* lead the reader to expect other informal and pungent phrases that are not listed. Among the missing: *wash sale*, *sucker list*, *cats and dogs*, and *Fanny Mae* (Federal National Mortgage Association). And where are *commercial paper* and *title*, which might well have been defined?

One would have appreciated rather more historical information: what are the sources for *bull* and *bear*, and how long have the terms been current? However, these are minor objections to a highly useful and interesting list. Since the days of open-air curbstone trading under the buttonwood trees of old New York, there has grown up a distinctive

vocabulary of investment, well presented in this brochure. It is available from the Exchange itself, and from its member firms.

### *Hidden Place Names*

THE BURIED INVENTORS in our March issue evoked a reply from a reader who is confident the locomotive whistle was named for its inventor, the husband of Whistler's Mother. (We are not making this up). However, *hwistlian* was a good Anglo-Saxon verb a thousand years before the locomotive.

Turning now to Buried Places, we find many articles bear, in fossilized form, the names of their place of origin. *Currants* are raisins from Corinth, to begin with, though *candy* is not from Candia. *Damascened* steel was developed in Damascus. *Troy* weight comes from the great mediaeval trade fairs in Troyes, France. *Parchment* recalls Pergamum in Asia Minor, where the presence of a library demanded a supply of writing material. More recently, the *stogie* was a cigar made in Conestoga, Pa. The list could be prolonged indefinitely by including terms in which the place of origin is still plainly evident: *morocco*, *Texas leaguer*, *mocha*, *java*, *Prussian blue*, *Rhode Island Red*, *hamburger*.

A single commodity, cloth, furnishes a whole catalogue of buried place names. For example, *lawn*, originally cloth of Laon. Similarly evolved are *denim*, *calico*, *lisle*, *muslin*, *damask* and *cambric*, from Nîmes (de Nîmes), Calicut, Lille, Mosul, Damascus and Cambrai respectively. There are dozens more.

To end on a local note: most of our readers must have worn Mackinaws when they were too young to have heard of the Straits.

A.C.G.

*There is no sure road to a good economic forecast  
—but some are more dependable than others.  
Which are the best indicators of economic trends?*

## Those Economic Forecasts

*By Daniel R. Fusfeld*

ECONOMIC FORECASTING is in the news in these days of recession. Everyone wants to know when the recovery will take place, whether we are really due for another substantial period of inflation, and when—oh, when?—will the next turning point come. It has been a long time since the economist has had so much attention, and that is a sure sign that things economic are not going well. If only as much attention were paid to the economist when we were riding the high tide of prosperity as at the low ebb of recession there might be less of a problem.

It has often been said that an economic forecast is only as good as the forecaster. In part that is true, but it is also true that the forecaster is only as good as his information. Even the best of forecasters needs accurate data if he is not to make wild guesses. What kind of information is available, and how does the forecaster make use of it?

There are, in general, three types of information used by economic forecasters:

1. Statistical information on the recent past of the economy. The most important gives the forecaster a picture of the present state of the economy and how it got that way: indexes of in-

dustrial production and national income statistics are examples.

2. Surveys of business and consumer spending plans and expectations. It is *not* true—as some observers have maintained—that we can “talk ourselves into a recession” or that “confidence in a growing America” will pull us out of a depression. But the expectations of businessmen and consumers do give us some idea of the direction, upward or downward, in which spending is likely to move.

3. Economic indicators: data about the recent past that give information about the probable course of business activity in the near future. For example, if new orders for machine tools have risen in recent months it may mean that production of metal products will soon be increased.

An examination of these sources of information will take some of the mystery out of economic forecasting by showing what we can and cannot learn from them.

### THE RECENT PAST

The most widely used data on past economic conditions are national income statistics. Estimated and published quarterly and annually by the Department of Commerce, and published in the *Survey of Current Business* and the *Federal Reserve Bulletin*, figures for gross national product, personal income, disposable income, business investment, consumer expenditures

---

DR. FUSFELD is Associate Professor of Economics, MSU. This article is based on a talk given at the Telephone Engineering Management Conference at Kellogg Center on July 29, 1958.

TABLE I

*The 1955-57 Boom**(All figures in billions of dollars)*

<i>Year</i>	<i>Gross National Product</i>	<i>Personal Consumption Expenditures</i>	<i>Business Investment</i>	<i>Government Purchases of Goods and Services</i>
1954	361.2	236.6	48.4	76.6
1955	391.7	254.4	60.6	77.1
1956	414.7	267.2	65.9	80.2
1957	433.9	280.4	63.6	86.5

SOURCE: Economic Report of the President, January 1958.

and the like, can give us a picture of the aggregate level of economic activity in the recent past. But they can tell us little about probable movements in the future. Furthermore, the figure for gross national product must be broken down into its major components if we are to gain even a partial appreciation of why the recent movements took place.

Let's look at the boom of 1955-57 as an example. As Table I shows, gross national product rose by some \$62 to \$63 billion from the 1954 recession low. Consumer expenditures kept pace with growing incomes, and increased by about \$44 billion, but this is only a normal growth associated with higher incomes, and seems to have been the result of the higher incomes rather than the "cause" of the boom. The one possible exception—very important for Michigan—was the auto buying splurge of 1955.

The major source of increased spending in 1955-57 was business investment, which jumped from about \$48½ billion—a level not much different from business investment expenditures from 1950 through 1954—to the near \$66 billion level of 1956. This was an increase of almost 36 percent in two years and rightly enables us to speak of the "investment boom" of the mid-fifties. But note that in the same two years personal consumption expenditures rose by only about 18½ percent and you realize why investment booms of that magnitude are not self-sustaining.

Government purchases were also causing increases in total spending during the 1955-57 boom, with a growth of almost \$10 billion. Almost all of the increase came at state and local levels, however, with Federal government purchases almost unchanged. Together with the boom in business investments, the increase in government spending contributed heavily to the economic expansion.

The flow of spending shown by national income statistics does not give an up-to-the-minute picture of the economy: the figures are published only quarterly and there is a time lag of several weeks between the gathering of the data and their publication. Statistics on actual production help fill the gap, and for a full picture of the current situation the forecaster will use such data as the Federal Reserve Board's index of industrial production, monthly data on employment and unemployment published by the Bureau of Labor Statistics, Federal Reserve data on bank clearings outside New York, figures on construction activity published monthly by F. W. Dodge Corp., and information on steel and pig iron production, freight car loadings, electric power production, paper-board production, and similar statistics that show actual production in the previous week or month. Again, however, these are "historical" data that may show what has happened in the recent past but not what may happen in the future.

National income and production statistics should also be supplemented by data on finance. It is from the financial sector of the economy that new funds can flow to bolster business investments or consumer spending—or government purchases. And information about the financial flow of funds can often be of great importance. For example, the investment boom of 1955-57 was largely rooted in financial expansion. As Table II shows, there was a tremendous increase in borrowing in 1955-57: in three years consumers and businessmen increased their indebtedness by a total of over \$68 billion (39.4 per cent) while gross national product was rising by only about \$72½ billion (20.1 per cent). In short, the increase in the value of total output was almost completely accounted for by increases in debt, and indebtedness was growing twice as fast as income. These conditions were hardly conducive to uninterrupted growth, and as early as the spring of 1956 danger signals from the financial sector of the economy were already evident.

It should be added that business profits rose nicely in 1955, and were a major reason for the growth of investment spending. But \$4 billion of the \$5 billion increase in corporate profits after taxes from 1954 to 1955 represented tax reductions rather than growth of business profits. Even the profit element of the financial picture

was the result of artificial stimulation.

An analysis made in, say, the fall of 1956 would have shown that the boom was largely a financial one and that productive capacity was outrunning consumer buying. It was clear that a recession or depression was in the making—but how deep would it be, how long would it last, and when would the turn take place? These questions about the future can never be answered on the basis of information obtained from financial or national income statistics. Such data can tell you only about the past. The forecaster must turn to other sources of information if he wishes to predict the future.

#### THE SURVEYS

The survey method has been used on an increasing scale in the last ten years. The basic idea is to get information about spending plans that will give the forecaster information on the direction and magnitude of movements in business and consumer spending. The surveyors ask businessmen and consumers about their spending plans and their assets. Although the surveys are relatively new they are now one of the most important of the forecaster's sources of information about the future.

There are three surveys that are widely used. One is a survey of investment plans made by the McGraw-Hill Publishing Company and reported in

TABLE II  
*Credit and Finance, 1954-57*  
(All figures in billions of dollars)

Year	Consumer Credit Outstanding	Mortgage Debt Outstanding	Business Loans By Banks	Corporate Profits After Taxes
1954	32.3	113.8	26.9	16.0
1955	38.7	130.0	33.2	21.0
1956	42.1	144.7	38.7	21.0
1957	44.8	156.1	40.3	20.6
INCREASE, 1954-57	12.5	42.3	13.4	4.6

Source: Economic Report of the President, January 1958.

the business journals published by them. Its research staff sends out questionnaires to a variety of industrial enterprises all over the country, asking them what their investment plans are for the next six-month and one-year periods. The replies are confidential, but the aggregated totals will enable the forecaster to tell whether businessmen plan to increase or decrease their investment spending, and by how much. This information must be used with care, however, for investment plans are flexible and are often revised at short notice. In addition, investment spending in the very near future is often known with great firmness, while spending six months or a year in the future may not have been firmly decided upon at the time the questionnaire is filled out. For this reason the McGraw-Hill survey tends to be more accurate for the six-month horizon and to underestimate the one-year horizon. It is extremely difficult to eliminate this downward error in investment surveys, and the longer the forecasting horizon the less is the reliance that can be placed upon them.

A second investment plans survey is made annually by the Securities and Exchange Commission, using data filed by business firms reporting to the Commission. It is reported in the *Survey of Current Business*, usually during the summer months. It has the same drawbacks as the McGraw-Hill survey, but it is always good to have two surveys that check each other.

The third important survey is the Survey of Consumer Finances published every year in the *Federal Reserve Bulletin*. It is done for the Federal Reserve System by the Survey Research Center at the University of Michigan, and is the most elaborate and complete survey of consumer expectations and plans that is available. A trained team of researchers questions a sample of the population all over the country about its financial assets, income, and ownership of durable goods, as well as its

expectations of income and plans for spending over the coming year. The sample is chosen with characteristics representative of the whole population in order to minimize errors. This survey is a mine of information. Here are some of the findings of the 1958 survey:

While many consumers were pessimistic about the business situation during the coming year, very few expected their own incomes to decline. . . . Nearly one-half of all spending units expected retail prices to rise over the year. . . . Plans to purchase new and existing houses were less frequent than in 1955-57, but somewhat more frequent than in early 1954. . . . Plans to purchase furniture and appliances were expressed by over one-fourth of the spending units, about the same as in early 1955 and early 1956 and only slightly below the proportion planning such purchases a year ago. . . . In early 1958 the proportion of consumers expressing plans to purchase new automobiles was substantially below the proportion reporting such plans in other recent years.<sup>1</sup>

However, few consumers plan purchases a year in advance, and when plans are made at the time of the survey they can be quickly changed. The Survey of Consumer Finances may tell us the attitudes of consumer at the beginning of any year, but it is not a forecast of actual purchases.

Every economist has his own opinion of the usefulness of the investment and consumer spending surveys. Some rely heavily on them and others pay little attention to them. My own evaluation is that they are very useful in confirming the existence of a trend, but do not enable us to forecast a turn. When the economy has been moving upward or downward for a time, and indications are that it will continue in the same direction, the surveys help to

<sup>1</sup>Federal Reserve Bulletin, March 1958, p. 249.

TABLE III  
 "Leading" Economic Indicators

Indicator	Source	Average Lead (Months)	
		Upper Turning Point	Lower Turning Point
1. Liabilities of industrial and commercial business failures	Dun and Bradstreet, Inc.	10.5	7.5
2. Dow-Jones industrial common stock price index	Dow-Jones & Co., Inc.	6.0	7.2
3. Value of new orders, durable goods industries	U. S. Dept. of Commerce	6.9	4.7
4. Residential building contracts, floor space	F. W. Dodge Corporation	6.2	4.5
5. Commercial and industrial building contracts, floor space	F. W. Dodge Corporation	5.2	1.7
6. Average hours worked per week, manufacturing industry	U. S. Dept. of Labor Bureau of Labor Statistics	3.8	2.6
7. Number of new incorporations	Dun and Bradstreet, Inc.	2.5	3.5
8. Wholesale price index, 28 basic commodities	U. S. Dept. of Labor Bureau of Labor Statistics	2.6	3.2

Source: NBER, Occasional Paper 31, p. 64.

show the magnitude of the continuing trend. At the turning points the surveys may be inconclusive and at variance with the underlying direction of the economy—but this in itself may help to spot the turns. At such times attitudes are changing, and respondents to questionnaires are not always sure of what their own attitudes are. In short, the surveys are useful, but must be supplemented by other approaches to the forecasting problem.

#### THE INDICATORS

Rapidly growing in favor is the use of statistical series that indicate later changes in economic conditions—series that "lead" the turning points of prosperities and depressions by some months. This approach has been pioneered by the National Bureau of Economic Research, and offers firmer ground for forecasting the immediate future than the shifting sands of expectations surveys. It is a method of longer standing, too, with the pioneer work being done in the thirties (al-

though it has come into wide use only recently).<sup>2</sup>

The NBER has found eight statistical series that generally "lead" the turning points of the business cycle. Table III lists those indicators, their source, and the average lead at the upper and lower turning points of the business cycle.

There is nothing magical about the statistical fact that an indicator leads changes in the aggregate level of activity. There is usually a good reason why each series is a leader. Take new incorporations as an example: part of the reason for a recovery is the organization of new enterprises, and one result of better business conditions is more new enterprises. The enterprises starting now will be contributing to greater output later, and more new firms now means more output later. Or consider average hours worked per week in manufacturing: when busi-

<sup>2</sup>The basic publications are "Statistical Indicators of Cyclical Revivals," Bulletin 69, National Bureau of Economic Research, 1938, and "Statistical Indicators of Cyclical Revivals and Recessions," Occasional Paper 31, National Bureau of Economic Research, 1950.

ness conditions weaken and new orders start declining the first result is elimination of overtime, then comes reduced hours, still later layoffs start, and finally the employer attempts to reduce wages. The first step in the process, however, is a shorter work week, and when manufacturing industry in general reduces the work week it is an indication that lowered output, sales and incomes will probably follow.

No single indicator means a turn, for no one has always led at every turning point. Nor should changes that are not sustained over several months be taken too seriously. But a consensus of the eight series that is sustained over a six-month period may mean that a change is on the way. And when it is confirmed by similar movements in indicators of current activity such as employment, corporate profits, freight car loadings, industrial production and gross national product, it becomes evident that a business trend is operating.

The eight leading indicators began a recognizable downward trend in the summer of 1955. By early 1956 the movement was unmistakable, and clearly indicated the coming recession. A year later the downward trend seems to have come to a halt. Since early 1957 there has been a three-to-four-month upward march of the consensus of the eight indicators, followed by a five-month fall, and most recently by a three-month upswing. The movement, in other words, has been erratic—and this may well mean that the business cycle was "bottoming out" even before the latest international upheaval in the

middle east. As this is written (July 1958) the leading indicators are moving upward, but the trend has not been sustained long enough to warrant a prediction that the upturn has started.

At any rate, one bridge from past to future is the group of eight leading indicators. They and the surveys tell us different things, but they are both small windows in our crystal ball.

It should be clear from this brief account that there is no sure road to a good economic forecast. There are, however, some things that any good forecaster will consider. The first step is to assess the trends of the recent past as they are reflected in the flow of spending and the flow of funds. It is usually possible to find some trends emerging that will probably affect the future. The second step is to open some windows on the immediate future by looking at the surveys of business investment and consumer spending plans, and through an examination of the leading indicators. Then comes the hard part of the job: assessing the significance of the facts that emerge. The quality of the forecast will depend on how well all three of these jobs have been done—and a large number of forecasts don't measure up very well. But if you come across a forecast that time proves to be wrong, remember this: the economist can easily forecast what is likely to happen in the next six months, or where the long-term growth trend is likely to take us ten years from now. It is the period in between that gives us trouble.

**IT IS IMPOSSIBLE** to lay down a railway without creating an intellectual influence. It is probable that Watt and Stephenson will eventually modify the opinions of mankind as profoundly as Luther and Voltaire.

LECKY

We take a look  
at our readers

## Who Reads Business Topics?

**B**USINESS TOPICS, to quote a statement carried on its masthead, is "published as a service of Michigan State University for all those interested in business and economic matters." Since "those interested in business and economic matters" include the corporation president, the neighborhood grocer, the economics professor, the housewife, the certified public accountant, the life insurance salesman, and many other people with varying types of interest and degrees of technical knowledge, the *TOPICS* audience is likely to be quite heterogeneous.

A policy of trying to appeal to such a varied audience by providing something of special interest for each small sector is obviously impossible to carry out. Consequently, it has been necessary to determine some aiming point—some particular group—toward which to orient *BUSINESS TOPICS*, with the hope that other groups will also find things of interest in the magazine.

The aiming point for *BUSINESS TOPICS* is the business executive in his role as a generalist and a citizen rather than in his role as an accountant, an engineer, a production man, or some other type of specialist which he may have been or may still be.

In orienting the magazine toward the intelligent businessman as such rather than as a specialist, it is necessary to carry subject matter of a non-technical nature and to present technical material in a relatively non-technical manner. Consequently, when *TOPICS* carries an article written by an accountant it is directed toward non-accountants. When it carries an article on foreign trade it is written for people who have not specialized in international economics. *TOPICS* editors often tell contributors, "We like to publish scholarly articles written by scholars, but not for scholars in your field. Write articles that are designed to interest and inform our readers, but don't try to impress them with your technical scholarship."

In order to find out what kind of an audience this policy is actually achieving, and in order to reduce waste circulation (to those on our mailing list who have decided that *TOPICS* doesn't interest them), a reply card was inserted in the March 1958 issue. The card, as most current readers know from having filled it out, asked those who wanted to continue receiving *TOPICS* to fill in the blanks and return it by mail. This served

the dual purpose of bringing us up to date on who our current readers are and of providing uninterested recipients with an easy way of getting off our mailing list.

The quality, variety, and geographical distribution of those readers who returned cards, many of which had unsolicited favorable comments written on them, were gratifying. The accompanying tables show our current audience of 4,753 classified by position or occupation, by type of firm or institution represented, and by geographical location.

To the editors, the most impressive facts brought out by the tabulations have to do with the types of positions held by readers and their wide geographical distribution. Since the tabulations are included for perusal by the interested reader, we will not insult his intelligence by commenting on their details. We do, however, have a wistful feeling that there must be a few people in Idaho and Maine, the only states in which *BUSINESS TOPICS* is not received, who would enjoy it.

E. P. C.

TABLE I  
BUSINESS TOPICS READERS  
CLASSIFIED BY POSITIONS HELD

<i>Type of Position</i>	<i>Number of Readers</i>
Presidents, Vice Presidents, Managers .....	1,057
Deans, Professors, Public School Teachers .....	870
Librarians .....	717
Editors and Reporters .....	487
Middle Managerial .....	244
Accountants .....	170
Salesmen .....	136
Chamber of Commerce Managers .....	103
Small Business Proprietors .....	97
Trade Association Officers .....	95
Engineers .....	80
Research Analysts .....	73
Miscellaneous Professional .....	46
Politicians .....	28
Lawyers .....	21
Housewives .....	18
Clerical Workers .....	15
Operational Employees .....	11
Farmers .....	7
Others and No Answer .....	478
Total .....	4,753

TABLE II  
BUSINESS TOPICS READERS  
CLASSIFIED BY INSTITUTIONS REPRESENTED

<i>Type of Institution</i>	<i>Number of Readers</i>
Educational .....	1,310
Manufacturing .....	1,040
Governmental (Township, City, County, State, Federal) .....	589
Newspaper, TV, Radio .....	505
Financial .....	430
Retail .....	130
Chambers of Commerce .....	105
Public Utility .....	81
Service .....	76
Research .....	20
Railroad .....	10
Wholesale .....	7
Other and No Answer .....	450
Total .....	4,753

TABLE III  
BUSINESS TOPICS READERS  
GEOGRAPHICAL DISTRIBUTION IN MICHIGAN

<i>Cities in Michigan</i>	<i>Number of Readers</i>
Ann Arbor .....	50
Battle Creek .....	55
Bay City .....	31
Benton Harbor .....	19
Detroit and Detroit Area .....	857
Flint .....	89
Grand Rapids .....	193
Jackson .....	83
Kalamazoo .....	86
Lansing and East Lansing (Michigan State University—289) .....	620
Midland .....	30
Muskegon .....	50
Pontiac .....	29
Saginaw .....	55
Traverse City .....	12
Other Lower Peninsula .....	1,260
Other Upper Peninsula .....	117
Total .....	3,636

TABLE IV  
BUSINESS TOPICS READERS  
GEOGRAPHICAL DISTRIBUTION

<i>State</i>	<i>Number of Readers</i>	<i>State</i>	<i>Number of Readers</i>
Alabama .....	12	North Dakota .....	1
Arizona .....	6	Ohio .....	115
Arkansas .....	5	Oklahoma .....	9
California .....	83	Oregon .....	12
Colorado .....	9	Pennsylvania .....	47
Connecticut .....	15	Rhode Island .....	2
Delaware .....	4	South Carolina .....	6
Florida .....	29	South Dakota .....	4
Georgia .....	15	Tennessee .....	9
Idaho .....	—	Texas .....	38
Illinois .....	145	Utah .....	5
Indiana .....	46	Vermont .....	1
Iowa .....	18	Virginia .....	16
Kansas .....	9	Washington .....	14
Kentucky .....	10	West Virginia .....	5
Louisiana .....	10	Wisconsin .....	33
Maine .....	—	Wyoming .....	2
Maryland .....	9	Washington, D.C. ....	31
Massachusetts .....	44		
Michigan .....	3,636	Total .....	4,722
Minnesota .....	25		
Mississippi .....	8	<i>Foreign</i>	
Missouri .....	22	Brazil .....	3
Montana .....	4	Canada .....	11
Nebraska .....	8	Hawaii .....	3
Nevada .....	1	Other Foreign .....	14
New Hampshire .....	5		
New Jersey .....	31	Total .....	31
New Mexico .....	4		
New York .....	145	Grand Total .....	4,753
North Carolina .....	14		

## ENERGY AND RAW MATERIAL REQUIREMENTS

### *For Latin America's Booming Industries*

By Pedro C. M. Teichert

*Continuation of the phenomenal economic development of South America depends largely on an accelerated use of sources of energy, and on provision for raw material procurement. To what extent are these needs being filled?*

IN A PREVIOUS ARTICLE the writer presented the crucial role the steel industry plays in Latin America's spectacular industrial revolution.<sup>1</sup> The same is true of other industries and particularly the development of energy sources which are at the base of any further industrial growth. Therefore, in the following pages it will be shown that the oil industry, the development of energy sources, and the procurement of raw materials is keeping step with the area's overall growth.<sup>2</sup>

*The Oil Boom*—The development of Latin American oil resources has shown a most spectacular rate of growth for the last two decades. The rate of growth in crude oil output was 7¾ per cent annually from 1938 through 1950 and 5¾ per cent thereafter. Oil development can play an essential role in Latin American economic progress, as almost all the twenty republics are thought to have oil reserves. Oil can provide the bulk of the fuel needed to support general economic development. Crude oil output in Latin America in 1951 was almost triple the 1940

level. The area in 1951 supplied eighteen per cent of the world's production, a proportion which is still maintained today. Yet much of the area's oil remains untapped.

In 1954 domestic consumption only took 37% of production and six republics were net exporters of oil. Also the area's refining capacity has about tripled since 1946 and further expansion is under way. The use of oil has gone up over three times since 1937, as would be expected in view of Latin America's rapid industrialization.<sup>3</sup> But there is still room for expansion since per capita consumption in 1951 averaged 1.7 barrels a day, as compared with seventeen barrels a day in the United States.

Unfortunately the bulk of Latin America's oil comes from Venezuela, and most of the other important republics have to spend large sums of foreign exchange for its importation. This is particularly true for Brazil and Argentina. Nevertheless most of the foreign investments in oil are made in Venezuela, because of the favorable investment climate that exists in that country. Out of foreign investments of six hundred million dollars in 1955 three hundred million dollars were invested in the petroleum industry and two hundred fifty million of it in Venezuela.<sup>4</sup> In the past few years many of the smaller Latin American republics have already passed oil legislation encouraging foreign participation in its development. By creating a favorable investment climate, many of the other

DR. TEICHERT is Professor of Economics at the University of Mississippi.

<sup>1</sup>Pedro C. M. Teichert, "Steel Development and Industrialization in Latin America," *Business Topics*, (East Lansing: Bureau of Business Research, Michigan State University), Vol. 5, No. 2, September 1957, pp. 20-26.

<sup>2</sup>This article does not consider the effects of the present depression, since the author does not believe that it will have a long-run impact on Latin America's rate of growth.

<sup>3</sup>The Chase Manhattan Bank, *Latin American Business Highlights*, December, 1955, p. 1.

<sup>4</sup>U. S. Department of Commerce, "U. S. Investments in Latin America Have Broad Effects on Economics", *Foreign Commerce Weekly*, January 28, 1957, p. 16.

nations could also attract substantial foreign investment in oil, which would greatly strengthen their economies and help industrial development. Latin American nations generally need a huge inflow of venture capital from abroad to develop their oil resources. Getting oil out of the ground and to market is a highly chancy process involving tremendous amounts of capital. The amount of venture capital needed is too large to be supplied locally.

At present Argentina and Brazil—the largest importers of oil—are still hostile to letting foreign enterprise and foreign capital participate in the development of their oil resources. Most of the other oil producing republics, though, have recently experienced a general relaxation of restrictions on foreign participation in the oil industry with the result that foreign companies have been very active in exploration. Brazil's attitude is particularly unfortunate since oil consumption in that country rose 84% from 1950 to 1954, and domestic output only meets 2% of demand. Yearly almost three hundred million dollars of scarce foreign exchange have to be diverted for the importation of oil. These funds could be better used to support broad industrial development, making it possible to import more scarce capital equipment.

Argentina has expanded crude output 25% since 1950, but she still depends on imports for more than half of her needs. Both Brazil and Argentina have sufficient oil resources to supply their domestic needs. But for political reasons it seems to be impossible to admit foreign private capital in its exploitation. In 1954, Argentina's petroleum imports added up to more than ten per cent of total purchases abroad, while Brazil spent thirty-five per cent of its dollar earnings for the importation of oil, and this made up fifteen per cent of all imports. Since 1952 the lack of dollar exchange in Brazil has reduced the

level of raw materials and capital goods imports. This factor definitely held back the rate of industrial growth.

Both Mexico and Colombia have an export surplus of oil. It is also interesting to note that Latin America refines about as much oil as it consumes, which is one-third of total output.<sup>5</sup> Privately owned refineries account for about ¾ of total output, government owned refineries for the rest. One of the largest new refineries is the government one at Cubatao, Brazil.

#### ENCOURAGING OUTPUT

The drive to build refineries in nations that are not self-sufficient in crude oil output is a reaction to the drain on foreign exchange which these nations experience when importing large quantities of refined oil. The local refining of imported crude oil may save roughly one-third of the foreign exchange required to import the refined products. Therefore, all Latin American republics are trying to expand refining capacities to meet domestic demand. It has been estimated that Brazil might save one hundred million dollars of foreign exchange by refining all crude oil imports. Though refineries involve heavy capital investments, the exchange savings produced will equal the investment in four to five years. Between 1950 and 1955 Brazil increased its refining capacity from ten per cent to over 50% of total consumption and plans to become self-sufficient in the next five years. This means that a large and immediate drain on dollar reserves will take place to buy the new equipment, while in the long run the new refineries will only solve part of Brazil's problem unless the nation starts producing its own oil in large quantities. This might only be possible if private foreign capital is admitted. It has been estimated that one billion dollars would be needed in Brazil to bring crude oil

<sup>5</sup>The Chase Manhattan Bank, *Latin American Business Highlights*, March, 1955, pp. 2-3.

output up to present demand. Of this, seven hundred to eight hundred million dollars would have to be spent abroad.

Unlike Brazil, both Cuba and Chile—net importers of petroleum—have recently changed their investment laws in order to increase output and encourage foreign investments. Almost all of Cuba's petroleum demand is now from imports, and consumption has been rising at an 8% annual rate since 1950. Since local supplies only cover one per cent of total demand, development of an oil industry would not only save foreign exchange, but would also offer a great stimulus to the economy.<sup>6</sup> The same applies to Chile.

In summing up Latin America's petroleum policies and development the following conclusions are evident: (1) That a correlation exists between the availability of oil and the pace of economic development. If oil imports are cut down, domestic output will be reduced. (2) That dollars or foreign exchange are decreasingly available for capital equipment imports as oil imports increase. Therefore, the development of oil through foreign investments may prove a real boon to the Latin American economies, both by cutting exchange requirements for imports of oil equipment, and by providing a source of export receipts. (3) That oil is also essential to the development of industry because of the lack of other low-cost fuel resources, particularly since shortage of electric power is a serious problem in many industrial areas of Latin America. A steady and rapid expansion of oil consumption is an essential prerequisite for economic growth of a modern industrial society. (4) That increasing refining capacity will go a long way toward saving valuable foreign exchange, but self-sufficiency in refining capacity still does not solve the problem of oil shortages

if the country is a considerable net importer of oil.

Finally there exists no doubt that tremendous benefits can be derived from oil development. By creating a favorable investment climate, Venezuela, for instance, has laid a sound foundation for its general economic development. Between 1950 and 1954 domestic use of petroleum has gone up 40%. Venezuelan oil explorations contribute a net per capita annual amount of foreign exchange equal to one hundred thirty dollars. That is more than annual per capita income in many Latin American nations and is enough to support rapid growth in Venezuela's living standards. There exists a definite correlation between energy consumption and national income. To develop petroleum resources is furthermore important because its consumption is increasing faster than other fuels and because it already makes up over 50% of total Latin American energy consumption. Also while this total consumption went up 75% between 1937 and 1952, petroleum consumption more than trebled.<sup>7</sup>

#### ENERGY PROGRESS

In spite of the fact that Latin American energy consumption per capita has gone up 1.6% per year since 1937, it does not satisfy demand. Rapid urbanization adds to the demand for commercial energy and cuts the use of vegetable fuels, particularly wood. The whole process of industrialization increases the need for additional energy requirements, particularly petroleum and electricity.

It has been calculated that the need for petroleum and natural gas may double in the next ten years. The same is true for electricity. Taken as a whole, Latin America has the natural resources to support a rapid rise in energy output. However, resources are not spread

<sup>6</sup>U. S. Department of Commerce, "Cuban 1957 Economic Outlook Bright," *Foreign Commerce Weekly*, February 25, 1957, p. 10.

<sup>7</sup>The Chase Manhattan Bank, *Latin American Business Highlights*, December, 1955, pp. 1-3.

evenly among the twenty Latin American republics, nor can all of them be used economically.

We already have pointed out that of the larger Latin American republics only Venezuela and Mexico produce sufficient oil to cover their own demand, while Argentina, Brazil, Chile and Cuba have to import it. Argentina and, particularly, Brazil, have sufficient proven oil deposits to supply their own demands, but capital is lacking. Argentina is currently supplying only half of its needs, Brazil only about 3%. In order to meet growing energy needs in Latin America an estimated annual investment of about one billion dollars would be needed, of which about 55% would have to be spent for imported equipment. This compares with total Latin American investments of 6.4 billion dollars in 1954.<sup>8</sup>

Unfortunately, in most republics the rate of return earned on electric utility investments has not been sufficient to attract the necessary local or foreign capital, since the governments are holding electric rates at unrealistically low levels. Consequently much investment (about 35% of new capacity between 1946 and 1953) is made by the governments. But few governments have the financial resources to shoulder the full burden of expanding electric power production to the levels required. Atomic power would only ease the burden ultimately, since initial investment outlays are very high. As with petroleum development, a favorable investment climate coupled with reasonable rate structures is necessary to stimulate the movement of local and foreign capital into energy production. This would reduce the burden of power projects on government budgets.

In spite of the fact that per capita energy consumption has gone up by 1.6% annually since 1937, Latin America is still far behind Western Europe and the United States. Per capita consumption in 1952 (in kilograms of pe-

troleum equivalents) was five hundred in Latin America, two thousand five hundred in Western Europe and six thousand in the U. S. It is of the utmost importance for Latin America to develop its energy resources, since they are basic to further economic development. By using more inanimate energy man can produce more and be more efficient. Output per man-hour will go up, with lower costs as a result.

A lack in rapid energy expansion will hinder Latin America's future growth. Also future energy demand will be largest for petroleum and electricity. Urbanization and industrialization are responsible for this trend. On a per capita basis, commercial energy consumption rose at an average annual rate of 4.1% between 1937 and 1952. That is 2½ times the rate of growth in total energy consumption per person. While between 1937 and 1952 the total use of energy went up in line with the increase in the area's production of goods and services, petroleum use more than trebled. Increased demand for petroleum for transportation, industry, and electric utilities is responsible for this trend. Latin American coal output is insignificant; so the trebling of electricity generation in the past fifteen years was based on oil consumption. Hydroelectric output also trebled, but capacity is far below potential. The reasons are financial, since hydroelectric works need tremendous initial capital outlays. Also it takes a greater capital investment to produce a dollar's worth of energy than is required in most other industries for a dollar's worth of output.

If Latin America is to fulfill its aspiration of raising yearly per capita living standards by 2½%, total production of goods and services must go up 4½%, since population is increasing at a yearly rate of 2%. To support this growth total energy output would have to keep step, but since the use of coal and vegetable fuels will remain stable—there is little coal in

<sup>8</sup>*Ibid.*, p. 1.

Latin America and vegetable energy cannot be efficiently used in industry—both petroleum and electric energy consumption will have to increase faster than the 4½% required to keep up with the area's over-all development. Consequently, the future use of petroleum and natural gas would have to rise by almost 7% per year, and that of hydroelectric production by almost 9%. Output of thermoelectricity might double in the next ten years if petroleum output can increase as expected, since it will be used to a large extent in future thermoelectric plants.

The hydroelectric potential of Latin America has barely been touched and is currently estimated as being at least eight and one-half times larger than installed hydro capacity. While over half of Latin America's present electric power is generated by hydroplants, only Mexico has developed as much as one-seventh of her potential. Though hydropower has the great advantage of involving no fuel cost, it requires heavy capital investment, and often few good hydropower sites are conveniently located near consuming centers. In contrast with the United States and Europe, where coal supplies over one-third of energy used, in Latin America it is only eight per cent. Only Colombia and Venezuela are thought to have abundant coal resources. Nevertheless, in over-all terms, Latin America has abundant energy resources. The main problem is how to meet growing energy needs at lowest cost.

In this regard, most of Latin America faces two drawbacks. In the first place, many Latin American nations must earmark a substantial portion of foreign exchange earnings to finance imports of fuel and capital equipment for energy production. In the second place, cost per kilowatt hour of electric energy output in Latin America is about three cents as compared with 1.8 cents for the United States. Nevertheless the governments are keeping utility rates unrealistically low in order

to make cheap electricity available for the national industries.

In 1953, Argentina's fuel imports made up 24% of all imports, Brazil's, 16.5%; Uruguay's, 10.4%; and Mexico's, only 2.8%. The heavy fuel importers may benefit as soon as atomic power becomes available because of the negligible cost of the fuel movement. However, atomic power installations involve a substantially higher investment per unit of output than conventional plants. The potential advantage of atomic power is the possibility of making plentiful supplies of energy available at comparable costs in most areas of the world.

Given the importance of energy production in connection with economic growth and rising living standards, there is reason to hope that Latin America can continue to make progress in mobilizing the investment to support its expansion. This is most important since there exists a definite correlation between energy consumption and high levels of per capita income.

The wealthiest Latin American nations are also the largest per capita consumers of electric energy. This category includes such countries as Venezuela, Cuba, Chile, Argentina, Mexico, Brazil, Colombia and Panama.<sup>9</sup> Furthermore, almost ¾ of the one billion dollars average annual energy investment estimated for 1954-1956 was to be used by Brazil, Argentina, and Mexico, followed by Colombia and Chile. Of this, over half would go for electric power and the rest for petroleum, of which a large part would be invested by Venezuela. According to this investment schedule it should not be difficult to ascertain which are the fastest developing countries in Latin America. Of course, with fast development also goes a rapid increase in per capita income.

<sup>9</sup>U. S. Department of Commerce, World Trade Information Service, "Comparative Statistics on the American Republics", *Statistical Reports*, Part 3, No. 55-47, pp. 1-3.

## RAW MATERIALS DEMAND

Latin American development in general—particularly its industrialization drive—compares quite favorably with recent world-wide industrial development. While Europe since 1949 has recovered her earlier economic vigor, in 1954 industrial production at the same time ran 81% above 1937. As a result, world consumption of raw materials is rapidly increasing. In 1950 free world demand for industrial raw materials amounted to 46 billion dollars and is expected to soar to 80 billion by 1975-1980. International trade in these materials may increase from 27 billion to 50 billion in the same period.<sup>10</sup> This is very important to Latin America since industrial raw materials make up about half the area's exports. By increasing raw materials production and exports thereof, Latin America could best obtain the rising foreign exchange income needed to support its industrialization drive and higher living standards.

Many of the Latin American republics are endowed with a variety of basic material resources and if they could diversify their raw material exports, trade fluctuations and dependence on a single export commodity would be minimized. It would be sound policy to attract as much foreign capital as possible in developing further raw material sources. Besides increased foreign demand, the growth of local Latin American industry is steadily increasing home consumption of raw materials. Clearly industrialization is now a well-established world-wide trend. In the free world industrial output has expanded 3½% per year since 1937, and 4½% yearly since 1950. It seems likely that over the long run expansion will continue to grow by at least 3% per year.

Furthermore in 1950 underdeveloped areas only produced 1/3 of the world's

industrial raw materials and their consumption is still so low that they are able to export a very large share of their production. Of 15.5 billion dollars of raw materials produced in underdeveloped areas in 1950, 13.5 billion were exported. As a result raw materials account for some 50 to 60% of the total exports. Advanced industrial countries consumed more than 90% of world industrial raw material supplies and also depend heavily on imports. However, only about half of these are drawn from underdeveloped countries; the rest come from other industrialized nations. While consumption of new materials in industrialized countries is rising they are gradually depleting their low cost domestic reserves. This means that a notable opportunity exists for the world's currently underdeveloped countries to increase their exports. These areas should be able, therefore, to boost exports to about 29 billion by 1975-1980, more than double 1950 levels. Since during the same period population is only expected to increase about 63%, the doubling of raw material exports would substantially raise per capita exports and stimulate economic development.

Latin American raw material exports in 1953 amounted to 3.6 billion—about half of the area's exports—and they might easily be increased to 7 billion by 1975-1980. Besides being rich in mineral resources the Latin American Republics are able to grow many of the important agricultural raw materials now in demand, as for instance inedible oils, wool, cotton, henequen, sisal and forest products. Though Latin America is rapidly industrializing, it is not yet able to sell many manufactures abroad.

The expansion of raw material exports by no means suggests that this be done in place of industrialization. On the contrary, the expected result of increased raw materials output and their exports is a fostering and maximization of Latin America's industrialization drive since increased exports are re-

<sup>10</sup>The Chase Manhattan Bank, *Latin American Business Highlights*, June, 1955, p. 1.

quired for the following: (1) To pay for an ever-increasing volume of machinery and equipment imports; (2) To earn enough foreign exchange with which to service foreign development loans; (3) To provide adequate funds for remittance of earnings on foreign private investments; (4) To pay for increased consumer good imports demanded by a rising standard of living.

The major problem involved in the development of raw materials is the lack of capital. Therefore the most important step is for governments to allow as much economic freedom as possible in order to encourage their development. Then resources will flow readily into the most promising lines and by establishment of a climate favorable to free enterprise foreign capital will be attracted. Recent developments in Chilean copper expansion are a good example of what a favorable investment climate can do to attract foreign capital and to expand raw materials production. The same is true in connection with Latin American oil development in Peru, Cuba, Chile and of course Venezuela.<sup>11</sup>

In connection with Latin American exports, it is important to remember that the Latin American republics have been paying for a sharply increased volume of imports with a fixed volume of exports. This has been possible because of the improved terms of trade. But it indicates that in order to sustain long-term development Latin America will be forced to increase its exports. Increased production of raw materials offers an excellent opportunity to do this, especially since many republics have scarcely begun to develop most of their resources. A large potential exists for the increased development of petroleum, copper, manganese, and iron ore, which is a relative newcomer. Lead and zinc production already show a healthy growth trend. The output and

exports of agricultural raw materials could also be further improved though there exists a certain lack of demand for them on the world market. This is particularly true for cotton.

While it is true that rapid economic progress requires a workable balance between growth of industry and the expansion of mining and agriculture, as well as between the rise in production for home consumption and for exports, many underdeveloped countries are not happy about being raw materials producers. Therefore in the past they have discouraged the expansion of their raw material industries. Fortunately at present a reverse trend seems to be setting in.<sup>12</sup>

It is true that the terms of trade for raw materials deteriorated from the 1920's to the great depression, but since the late 1930's raw materials prices have risen faster than finished goods prices. Also world-wide industrialization is at present steadily expanding demand for raw materials and it looks as though price relationships might remain favorable to the raw materials producers in the foreseeable future. Another argument against raw materials production is alleged instability of prices and sales volume for these products on the world market, resulting in violent fluctuations in the value of trade and working great hardships on Latin American economies. But in reality exports of manufactures fluctuate just as much in value and volume as raw materials. If underdeveloped countries have suffered more than industrial countries as a result of fluctuating raw materials exports, it is because they depend on only one or two commodities for the bulk of their export earnings. They have a monocultural export pattern.<sup>13</sup> Any single commodity, of course, fluctuates more than the whole

<sup>11</sup>U. S. Department of Commerce, "Chilean Cost of Living Drops Slightly", *Foreign Commerce Weekly*, January 28, 1957, p. 21.

<sup>12</sup>U. S. Department of Commerce, "Central America Open to Investors", *Foreign Commerce Weekly*, February 25, 1957, pp. 2, 6.

<sup>13</sup>Horn and Bice, *Latin American Trade and Economics*, (New York: Prentice Hall, Inc., 1949), p. 134.

group of primary products taken together.

There really exists no theoretical reason why Latin America should not develop its raw material resources. On the contrary, rapid economic progress requires balanced economic growth, which means equal emphasis on industry, mining, and agriculture. Fortunately, the industrial boom the world has been experiencing after World War II has given the underdeveloped areas an excellent opportunity to ship raw materials to the advanced industrial countries in return for machinery and equipment which they need to build up their own industries. It is hoped that after the recession we are now experiencing—which is supposed to be of a short duration—the continuous flow of raw materials at profitable prices will be resumed. By boosting raw materials production and exports, the underdeveloped economies of Latin America can earn the growing volume of foreign exchange that they need in order to finance their industrialization and to raise the standard of living of their people.

#### CONCLUSION

For the past two decades, Latin America has had a tremendous development boom and the amazing growth record shows that the Latin American

economy possesses great vitality and adaptability. Development has taken place on all fronts and in spite of the fact that the area has pushed industrialization very hard, agriculture in most republics has been able to expand faster than population. Consequently the per capita standard of living has been growing continuously.

Also the past record provides basis for confidence that the twenty Latin American republics will continue to measure up to the formidable challenge of having, because of their rapidly increasing population, to run much faster than other nations if they want to raise living standards on a continuous basis. Encouragement of foreign investments and the general amelioration of Latin America's investment climate is a further guarantee that they will be able to achieve their goal. Under this new economic policy, the Latin American republics will make greater progress and solve their problems more readily if they strive for balanced development. That means that they would have to move ahead simultaneously on all fronts—increasing food production, export production, industrialization and resource development to the same degree. If this can be done, Latin America's economic development will continue to be the most rapid in the world.

**PURPOSE MUST LIE** outside of the business itself. In fact, it must lie in society, since a business enterprise is an organ of society. There is only one definition of business purpose—to create a customer.

PETER DRUCKER

*In a period of inflation, a new method  
of providing retirement income  
deserves careful scrutiny.*

## The Variable Annuity Controversy

By R. F. Salmonson

THE AMERICAN PUBLIC is, in general, security conscious. Many factors, such as longer life expectancy and compulsory retirement, have caused individuals to worry about providing for a retirement income. Consequently, annuities have received their share of attention. However the hardship suffered in a period of inflation by persons living on fixed incomes has caused doubts to appear as to the ability of conventional annuities to provide satisfactory retirement incomes. If inflation were to continue, a retired person would have to have a larger number of dollars of retirement income in order to maintain the same standard of living. In the light of the supposed ability of common stock investments to provide a hedge against inflation, it was only natural that a marriage between the annuity concept and common stock investments should occur. The resulting offspring is the so-called "variable annuity."

An annuity, in a strict sense, is nothing more than a series of equal dollar payments equally spaced in time. The periodic interest payments which a person receives on a bond investment constitute a type of annuity. Another example of an annuity would be found in a situation where a person pays an insurance company a certain sum of money and receives in exchange a guarantee that the company will pay to this person (the annuitant) a certain number of dollars each month for a

certain number of months. In the bond illustration above, the owner receives interest during the life of the bond and his capital (the face amount of the bond) is returned to him at the maturity date of the bond. In the second illustration, the annuitant's receipts consist partially of capital and partially of interest. He is, in effect, consuming his capital and the interest it is able to earn. At the end of his annuity contract, his entire capital will have been returned to him through the periodic payments.

The annuities usually included in retirement income programs are life annuities. A life annuity is a contract calling for regular periodic payments to be made to the annuitant throughout his remaining life. It matters not whether the individual lives one month or three hundred months, he receives payments until he dies. The life annuity is a method of insuring against the possibility that a person may live too long, that is, outlive his income. Insurance companies, in effect, play the law of averages in entering into life annuity contracts. They do not know how long a particular individual may live, but their mortality tables will tell them, on the average, how long persons of a certain age will live. Thus, in a group of persons, the funds paid in by those who die early will be used to make payments to those who live beyond their expected life. In this manner, life insurance companies can guarantee payments for life to all persons who purchase life annuities from them.

DR. SALMONSON is Assistant Professor of Accounting, MSU.

A life annuity contract may also contain provisions varying the length of time during which payments may be made. For example, a contract may call for payments to be made throughout the life of a husband, with the payments to continue until the death of the wife. Or the contract may be written as above and also contain a provision guaranteeing a minimum number of payments regardless of the time of death of either the husband or wife or both.

Annuities which call for the payment of a guaranteed number of dollars each time payment is made are also called fixed dollar annuities. In some respects this term is a misnomer, as many variations are possible. One variation is the so-called participating annuity wherein only a minimum number of dollars is guaranteed. The actual number of dollars paid may vary and is dependent upon the life insurance company's interest-earning experience. For example, the contract may be written guaranteeing payments under the assumption that the company will earn 2¼% on its investments. Should the company actually earn 3½%, a participating dividend may be declared, thus varying the number of dollars the annuitant would receive.

A number of other possible provisions in fixed dollar annuities may, in reality, make them variable. The company may reserve the right to change the rates under which the funds are being accumulated to provide the retirement payments. Also, of crucial importance are the provisions relative to vesting. A person may be required to remain in the employ of a given company for a certain number of years before he is certain of owning an annuity. If he leaves prior to that time he does not own an annuity even though he may have received periodic reports showing that funds were being accumulated to his credit. From these and other possible provisions it can be seen that

the fixed dollar annuity may be subject to many variables.

#### THE VARIABLE ANNUITY

Although even fixed dollar annuities may contain provisions which make them variable, the term "variable annuity" has a specialized meaning. It refers to an annuity contract which guarantees payment of a fixed number of "accumulation units" rather than a fixed number of dollars. The value of the accumulation units fluctuates; therefore, the dollars received by the annuitant will vary from period to period. The reason for this fluctuation is that the accumulated funds are invested in common stocks rather than in interest-bearing securities. This investment in common stocks is the primary and controversial distinguishing feature of variable annuities. Thus, instead of each premium payment during the working years purchasing a guaranteed number of dollars per month of retirement income, each premium payment on a variable annuity contract purchases so many units. The number of units which each premium payment will buy depends upon the market value of the units. For example, suppose that the fund to which a man is making \$60 per month contributions has stocks with a market value of \$10,000. The claims against these stocks are represented by 2,000 accumulation units. Thus, each unit is worth \$5, and a contribution of \$60 will purchase 12 units. Suppose further that next month the fund has stocks with a value of \$18,000 and has 3,000 units outstanding. Each unit is worth \$6 and, obviously, a \$60 contribution will purchase but 10 units.

Upon retirement, suppose this same man has accumulated 2,000 units and has a life expectancy of 200 months. He would receive 10 units each month. For his first month of retirement, if the value of the units is \$20, he would receive \$200 of retirement income. In the second month, if the value of the units is \$18, he would receive \$180.

Each month he would receive, in cash, the current value of ten units, whether the units be worth four dollars or \$100 or more. He would continue to receive these payments for life. Other provisions, such as those mentioned above with respect to fixed dollar annuities, may be incorporated in his variable annuity contract. It should be noted that the above example is illustrative only and is over-simplified; it does not represent in their entirety the technicalities of variable annuities. It should also be noted that variable annuities are not widely available. Enabling legislation is yet to be secured in most states before such annuities can be offered by insurance companies.

Equity, unit or common stock annuities are terms synonymous with variable annuities.

#### THE ARGUMENTS FOR VARIABLE LIFE ANNUITIES

As indicated earlier, the primary advantage claimed for variable life annuities is that they tend to provide for a retired person's actual need—the need for real income (purchasing power) rather than for merely a fixed number of dollars. Proponents of variable annuities make an assumption which is of crucial significance—that the market prices of common stocks vary as does the general price level. Thus, during periods of prosperity and high prices the units in a variable annuity would have a higher value and would yield a larger periodic cash payment. This larger cash payment would provide a relatively stable, or perhaps slightly increased standard of living. The real value of the payment would be reduced by the higher prices which would have to be paid for the necessities of life. In periods of recession and lower prices, the periodic cash payment would be smaller, but, because of the lower prices, this smaller cash payment would still permit continuance of the same standard of living. The so-called variable annuity is not, in terms of

purchasing power, nearly so variable as is the so-called fixed dollar annuity.

Retired persons with fixed dollar annuities are relatively defenseless against the ravages of inflation. They accumulate funds for their retirement during their working years in an amount such that they could live comfortably in their retirement years if prices remain relatively stable. Continued inflation soon reduces their retirement income, in real terms, to such a level that they are virtually paupers. They set aside 30¢ in a time period when it would purchase a dozen eggs. When it is returned to them, it will purchase only a half-dozen. Variable annuities, therefore, give retired persons some measure of defense against the erosion of their retirement income by inflation.

Another advantage claimed for variable annuities is that they are likely to provide a higher retirement income from the same accumulations during the working years. Studies have shown that the average annual yield and appreciation of common stocks since 1900 has been approximately 8% and has averaged considerably higher in the post-war years.<sup>1</sup> Detailed studies by Prudential economists show that "using a 15 year accumulation period and a 15 year retirement period, there has not been a single instance during the past 77 years when the annuitant would have failed to secure a higher total retirement benefit under a common stock annuity" than under the traditional type of annuity.<sup>2</sup>

In summary, then, there are two direct advantages obtainable from the use of variable annuities. With the value of the units dependent upon stock market prices, which are assumed to vary with general price levels, the annuitant is protected against inflation. Because of the higher earning power of common stocks, a higher retirement

<sup>1</sup>George E. Johnson, "Some Answers To The Variable Annuity Puzzle," *Journal of American Association of University Teachers of Insurance*, March 1956, pp. 47-54.

<sup>2</sup>*Insurance Advocate*, May 10, 1958, p. 38.

benefit is secured and the annuitant is permitted to share in the ever-higher standards of living of the American society.

This latter point may be overlooked in planning retirement income programs. Apparently a person retiring in, say, 1958 is expected to live throughout his retirement years at a 1958 standard of living while the rest of the economy moves on to higher standards. The savings of persons for their retirement years can be the capital which businesses so badly need. This increased capital will assist in increasing productivity resulting in higher standards of living. By investing in common stocks through variable annuities, retired persons need not be left out in the movement toward higher standards of living.

Among the many ramifications of variable annuities, there are several with politico-economic aspects. If more and more persons were to invest their savings indirectly through variable annuities in the common stocks of our business firms, might there not be some lessening of the tendency to look upon business as being bad *per se*, the cause of all of the evils and injustices in our economy? If more and more people were to be dependent upon business profit for part of their retirement income, would profits still be looked upon as being unnecessary?

Also, what are the alternatives to variable annuities if a person desires some form of a hedge against inflation? He must buy common stocks, mutual fund shares, real estate, etc. "on his own." In addition to requiring some managerial ability, none of these has the feature found in life annuities of automatically spreading capital and earnings over a lifetime. Therefore, if he wishes to consume capital and earnings with a guarantee that his income will continue until he dies, he must rely upon fixed dollar annuities. If these should prove inadequate in periods of inflation, he may have no alternative

but to rely upon governmental relief. As the number of older persons in our society increases absolutely and relatively, their demands could not, politically speaking, be safely ignored. Thus, additional taxes may be placed upon the current working population to provide relief payments to retired persons.

Many of the variable annuity advocates are also supporters of the "balancing" principle. Stated simply, this means that all of a person's retirement income should not come from variable annuities. There should be a proper balancing of variable annuities with fixed dollar annuities so that a person has a hedge against either rising or falling price levels. Adherence to the balancing principal means that a retired person's real income would vary, but not as widely in either direction as the general price level.

#### THE ARGUMENTS AGAINST VARIABLE LIFE ANNUITIES

Opponents of variable annuities claim that such annuities are nothing but rank speculation. If variable annuities are stripped of their technicalities they offer nothing more than a chance to participate in a portfolio of common stocks: this is speculation, they claim, and not insurance.

To the extent that purchase through the years of a diversified holding of the common stocks of some of our major corporations, under the guidance of "expert" management, is speculation, this argument is valid. However, many studies have shown that good stocks weathered the storm of the early 1930's and came back strongly to outperform bonds. This argument is also based to a certain extent upon the doubtful premise that the bonds of a certain company will be good even though its common stock is worthless. Over longer periods of time, both bonds and stocks depend upon business earnings for their value. And further, if all of the stocks in a portfolio of high grade common

stocks should prove valueless, is it not possible that the extent of economic chaos would be such that even highly regarded U. S. Government bonds might be of little value?

Perhaps the most valid argument against variable annuities is that which attacks the supposed correlation of movement between stock market prices and consumer prices. A detailed study comparing the monthly Dow-Jones Industrial Stock Average with the monthly consumer price index shows that common stock prices fluctuate much more widely than do consumer prices.<sup>3</sup> This study further shows that stock prices may move in an opposite direction from consumer prices. For example, in the 12 months ending April, 1957, stock prices were down 13% while the consumer price index rose 2 to 3 %. Thus, it is argued that variable annuities do not lessen the inflation-caused hardship of retired persons, but merely change its timing. A retired person holding a variable annuity contract would suffer greater hardships during recession periods and be over-rewarded during stock market booms. He would not be living out a tranquil retirement. Instead, he would be living in anguish and anxiety wondering how much further the stock market was going to fall while his cost of living continued to rise. Retired persons should not be subjected to such torments. But, then, neither should they be subjected to the anxiety accompanying an ever-rising price level and a fixed dollar income.

Continuing in the same vein, it is argued that during periods of stock market boom a variable annuitant would move to a higher standard of living because of the over-rewarding feature of variable annuities. Then, when stock prices start falling, he would be forced to make the painful and difficult transition to a lower level. It may be that such a move would be

psychologically more painful than a steady erosion of the real income from a fixed dollar annuity. However, inflation rather than deflation appears to be the major economic problem of the future.

It is apparent that a variable annuitant will suffer a relatively greater hardship than a fixed dollar annuitant in a period of falling stock prices and rising consumer prices. However, over longer periods of time stock prices and consumer prices have tended to move together. Consequently, the choices seem to be: (1) should a person purchase only fixed dollar annuities and face a steady erosion of his real income, or (2) should he purchase both fixed dollar and variable annuities, (realizing that he may suffer somewhat more hardship if stock prices fall and consumer prices rise) from which he will probably receive a greater retirement benefit than from fixed dollar annuities alone?

A further contention is that for many persons a variable annuity will not function in the desired manner. Many persons accumulating stock will become faint-hearted and withdraw during longer periods of depressed stock prices. They will make payments on their variable annuity contracts only during periods of high stock prices. As a result, they may receive considerably smaller retirement incomes than under fixed dollar annuities. Failure to adhere to the long-recognized investment principle of dollar averaging—buying stocks continuously, whether prices be high or low—would be a serious blow to a variable annuity. It is quite essential that any person entering into a variable annuity contract accept and adhere to this principle.

Another argument against variable annuities is that they are advocated with the idea that inflation is inevitable. Such a belief discourages saving and encourages speculation. Time and effort should be spent in trying to prevent inflation rather than trying to keep up

<sup>3</sup>William A. Berridge, "The Variable Annuity Argument," *The Journal of Insurance*, November, 1957, pp. 71-87.

with it. This is perhaps an admirable idea. However, what chance does an individual have against all of the powerful inflationary forces at work in our economy?

A further argument against variable annuities is, in reality, an argument against the prospect of life insurance companies selling such policies. People generally think of life insurance companies as providing guaranteed benefits. Since variable annuity contracts do not provide guaranteed benefits, they are not insurance and should not be sold by insurance companies. The general public, it is argued, does not, and will not, understand variable annuities. Consequently, public faith in insurance companies may be seriously damaged if variable annuity contracts sold by life insurance companies should have little value when relied upon for retirement income.

While it is true that the risk of loss of value, in terms of dollars, is borne by the holder of a variable annuity contract rather than by the insurance company, such contracts are still insurance since the insurance company assumes the risk of time of death. But is it not also true that the individual bears the risk of loss of value, in terms of purchasing power, in a conventional annuity with the life insurance company again assuming the risk of time of death? Proponents of variable annuities argue that such contracts should be sold by insurance companies. Only in this way will variable annuities be actuarially sound and the funds accumulated conservatively invested.

It should be noted that the U. S. District Court of Appeals for the District of Columbia recently held that variable annuities are not securities and that an insurance company selling such policies was an insurance company and not an investment company.

#### CONCLUSION

Thus the arguments run, pro and con. Indicative of the controversial nature of variable annuities is the fact that our two largest life insurance companies disagree completely on the merits of such annuities.

Perhaps the greatest need in this controversy is for education. A person should not purchase a variable annuity without full knowledge of exactly what he is acquiring. To purchase a variable annuity with the expectation of a *guaranteed* larger number of dollars of retirement income would be a grave mistake. In acquiring such an annuity, one should also bear in mind that many of the recognized and successful investment principles are applied in the management of the portfolio of common stocks in which he is acquiring an interest. Such principles include dollar averaging, compounded re-investment of dividends and capital gains and diversification. Supported by such principles, the inclusion of a variable annuity contract in a retirement income program which also includes social security benefits as well as a fixed dollar annuity, does not seem unduly speculative. It may be that the failure to include some form of hedge against inflation is indeed a far greater speculation.

*If there is to be a great through route from east to west through Michigan there must be a sure and permanent crossing at the Straits.*

from an editorial in the *Grand Traverse Herald*, 1884.

## READING FOR BUSINESS AND PLEASURE

### *Cultural Foundations of Industrial Civilization<sup>1</sup>*

**B**EHIND EVERY VOLUME of written history is projected the shadow image of the history that cannot be written. We have the works of Tacitus and Livy to exemplify the Roman concept of the development of the state, but who has read a Carthaginian account of the Punic War against Rome? Perhaps Henry Ford's famous statement, *History is the Bunk*, makes good sense in view of the one-sided narratives of conventional history, a library of collected works of the victors.

As a corrective to an account of the past in terms of campaigns and discoveries, economic history has served a distinctly illuminating role.

The study of economic history is a corrective to misconceptions about the human tale of woe as a long series of discoveries, campaigns and double-crosses. Its searchlight reaches far back into the shadowed past, revealing the Trojan War as a struggle for the Black Sea grain route, or the discovery of America as an incident in the search for a better way to the Spice Islands. It points out, as well, that the invention of gunpowder and printing served the ends of the emergent middle-class society of Europe's cities.

If the reader is satisfied with economic interpretations as the final answer to the riddle of history, he may search no further for underlying causes of actions and movements. The author of the present book, however, goes behind the economic causes and finds the basic explanation for the trend of modern history in the formulation of a new scale of values, fundamentally spiritual in nature. His work is less an economic

interpretation of history than an historical humanistic interpretation of economic development.

Modern man is identified with his tools and his products: statistics, higher mathematics, interchangeable parts and mass production. To say that the bias of his character is toward these interests is not to go very far toward an explanation of how he got this preoccupation. In stopping with a materialistic explanation of the growth of our society we have not penetrated very deeply into the jungle of the past.

As an example of the partial explanations with which economic history tends to stop, take the familiar relationship between the new fashion of wearing body linen and the rise of printing in the fifteenth century. The student of the period rightly lays stress upon the importance of printing for the development of a mass culture. He will grant the obvious fact that printing could not have spread so rapidly without a sufficient supply of linen rags, the raw material of paper. He will agree that the popularity of the white shirt, in the last analysis, made a literate population possible. But the full implication of this relationship can only be appreciated by carrying the search for causes outside the realm of economics.

The white linen shirt of the fifteenth century was not just a fashion. It was the outward and visible sign of a new orientation in human values, toward personal comfort, urbanity, "the spread of good form in the arts and in the art of living". Its introduction from the Arab world indicated an acceptance of the everyday amenities of a more cultivated society. The men who wore the linen may have provided the rags for the paper; more important is the fact

<sup>1</sup>*Cultural Foundations of Industrial Civilization*, John U. Nef. Cambridge, the Cambridge University Press, 1958.

that they provided the receptive mass audience for the printed word. It bears repeating that an invention succeeds when the time for it has come. There had to be not only movable type and rag paper but a spirit of inquiry in order for typescript to displace the rare and expensive manuscript, laboriously lettered on parchment.

Though Professor Nef does not cite this particular instance of the interdependence of humanistic and industrial progress, his book is full of examples of the changing intellectual climate in which the industrial society of today had its origin. He lays considerable stress upon the part the Catholic and Protestant churches played in working out new relationships between the spiritual and practical sides of life. It may seem to some readers that too much emphasis is laid upon this factor, but the book's handling of the fundamental question of the organic development of the modern world will stimulate even those it does not convince.

The author's thesis, developed with considerable subtlety, is that *civilization* is both a modern term and a modern concept, arising no earlier than the eighteenth century. It designates a refining and spiritualizing of society in universal terms, and while it may express itself in the production of material goods for the many, the underlying impetus is not a material one. An "economy of delight", in the structure of the rising national states in the late fifteenth and early sixteenth centuries, provided the stimulus for the manufacture of artifacts for pleasant living. *Qualitative* industrial progress preceded *quantitative*: the making of elegant adornments for the newly rich taught the technical skills which were to be-

come essential for an industrial society. In the author's words:

Civilization, in the sense in which the word was invented, provided an essential framework for a spread of industrialism, and in that sense civilization hardly existed in the mid-sixteenth century . . . The progress of the human soul was not a function of the modern technological progress, which became sensational in the nineteenth and twentieth centuries; rather it helped to create conditions that encouraged such progress.

Craftmanship, to make industrialization possible, had to provide luxuries and comforts that large numbers of people could be induced to desire. The implication for the future is that the inquiring mind must continue to generate a certain creative restlessness, in order to give direction to a world-wide industrial society.

A humanistic education, enriching the "non-productive" and "impractical" side of man's nature is thus absolutely indispensable for present and future civilization. The much-criticized United States exhibit at the Brussels World's Fair is a partially successful attempt to portray contemporary American culture in this humane light: the good life made possible for the many *through* industrial development, but not oriented toward it.

Professor Nef is Chairman of the Committee on Social Thought and Professor of Economic History at the University of Chicago. His book represents the result of many years of study of the origins of our industrial civilization.

Anne C. Garrison  
Associate Editor  
Business Topics

## Books in Brief

NIXON, EDGAR B. *Franklin D. Roosevelt and Conservation, 1911-1945*. 2v. Washington, D.C. United States Government Printing Office, 1957.

This work represents a selection from the papers of Franklin D. Roosevelt from the Franklin D. Roosevelt Library. Only those papers having to do with the conservation of what are commonly called "the natural and renewable resources such as soil and water, forests and other soil cover, wildlife, and scenic and wilderness areas are included." Not only does the work present an excellent account of Roosevelt's attitude toward conservation, but it also traces, in a large sense, the feeling which the public had towards conservation during this period.

WAGNER, CHARLES L. H. *The Story of Signs: An Outline History of the Sign Arts*. Boston, Arthur MacGibbon, 1954.

A fascinating account of the history of signs. Beginning with the earliest forms of "picture writing" and the hieroglyphics of the Egyptians, the history of signs is traced to the present. Included are illustrations that mark many of the past ages of history. This book will appeal to anyone wishing to know something about the signs we see about us.

GREGORY, PAUL M. *The Baseball Player: An Economic Study*. Washington, D. C., Public Affairs Press, 1956.

A book for all students of baseball, especially those interested in knowing about the economic, social, and psychological conditions of the baseball player. Ever since the 1951 Congressional hearings on organized baseball, there has been a growing interest in the life of the ball player. Discussed are such items as occupational hazards, security benefits, wage trends, psychological

factors, and the exploitation of the ball player. The author does make clear that for every star there are hundreds of others who just manage to struggle along.

FOX, VERNON. *Violence Behind Bars*. New York, Vantage Press, 1956.

This explosive account on prison riots in the United States well illustrates many of the problems faced by prison management. The author, psychologist of the Michigan State Prison in 1952, presents a vivid account of the events that led toward some of the famous prison riots of this country, and, finally, gives an hour-by-hour account of the prison riot he was concerned most with—that at Jackson in 1952.

MAYER, MARTIN. *Madison Avenue, U.S.A.* New York, Harper & Brothers, 1958.

Are you interested in advertising? If so, this is the book for you. Inside of one set of covers Mr. Mayer tells us about agencies, about clients, about the people, materials, and other resources that make the field of advertising. The author discusses agencies such as J. Walter Thompson, N. W. Ayer & Son, and Batten, Barton, Durstine & Osborn, pointing out many of the clients of each, and, in general, telling what makes these as well as the other agencies click. In a nutshell this is a fascinating book covering all aspects of advertising.

LIFE MAGAZINE. *Life's Study of Consumer Expenditures*. New York, Time, Inc. 1957.

In this volume, the first of a projected series, Life Magazine presents a survey of the expenditure pattern of the American family. This study is based on personal interviews conducted with consumers themselves with emphasis on how the consumer used the product

rather than its source in the production process. In describing "the consumer market for each and all categories of products and services," the study should prove valuable to all persons making marketing decisions and to all others interested in how the American family spends its dollar.

POLLOCK, FREDERICK. *Automation: A Study of Its Economic and Social Consequences*. New York, Praeger, 1957.

Instead of stressing the technical aspects of automation, the author deals mainly with the economic and social problems that automation will bring. In presenting both optimistic and pessimistic views of the impact automation will

have on the world's economy, the book makes clear that automation is more than increasing production via the use of machines; that it is imperative for increased emphasis to be placed on the economic and sociological aspects of automation.

FORTUNE MAGAZINE. *The Art of Success*. New York, Time, Inc., 1956.

This book has very interesting accounts of some of America's leading businessmen. Among the men included are Harlow Curtice, Clarence Randall, Clint Murchison, and the Rockefeller brothers. This book proves that this country is still a land of opportunity for those who desire to move ahead.

W.S.S.

## *Bull Moose and Hound's Teeth*

CLICHE EXPERTS recently had a field day over an embarrassing Washington political contretemps involving vicuña coats, hotel bills, oriental rugs and other elements of American public life. As a description of the moral righteousness or unrighteousness of a certain man close to the President, both sides in the hassle trotted out that venerable phrase, "clean as a hound's tooth". Reporters traced the simile back to Adlai Stevenson, who was quoting from Eisenhower's 1952 campaign promise of clean government. Who has a political memory long enough to remember Theodore Roosevelt's use of the phrase in his own campaigning?

He was a man of great pungency of speech, and his background of life on the Western plains may have given him this phrase at first hand. It derives from the herders, who are ever on the watch for evidence that a dog has been killing sheep. A hound suspected of this practice has his mouth examined for telltale bits of wool. A clean-toothed hound is as far above suspicion as a political candidate asseverating his party's rectitude.

# Current Business Conditions

BY JOHN H. HOAGLAND

An impressive business recovery is occurring. July and August business conditions improved over the increased activity of May and June. If the automobile labor disputes can be settled without too much strike activity business conditions for the fall of 1958 should continue to climb noticeably from the recent recession low of April. This relatively sharp recovery has been stimulated by emergencies in the Middle East and China areas, increased government spending, more inflation, few major strikes, and a change from inventory liquidation to inventory accumulation. Even with automobile production persisting at a very low level, total business activity has improved. If the planned production of 1959 model cars can be achieved reasonably soon, it will provide a further stimulus.

The only foreseeable event which can halt the business recovery during autumn is a prolonged automobile strike, and that is not expected to occur. Inflation in labor and material costs, plus increased competition at lower profit margins, are factors which can eventually slow the recovery.

## PRODUCTION ACTIVITIES

*Steel Production* is above that of the first of the year. When 1959 automobile production materializes this should rise further.

Week Ending	Index 1947-49=100	% of Rated Capacity
January 4	93.4	55.6
July 5	85.7	54.1
July 12	89.8	53.4
July 19	92.2	54.9
July 26	96.2	57.3
August 2	97.2	57.8
August 9	98.7	58.8
August 16	101.6	60.5
August 23	105.2	62.2
August 30	106.8	63.6

*Industrial Production*, as measured by the Federal Reserve Board's seasonally adjusted index, gives a good indication of the recovery. From August 1957 through April 1958 this index dropped 19 points. By the end of July it had recovered 7 points.

Month	Index	Month	Index
August '57	145	February '58	130
September	144	March	128
October	141	April	126
November	139	May	128
December	136	June	131
January '58	133	July	133

*Barron's Weekly Index* of physical volume of business, adjusted for seasonal and long-term growth trends, indicates that activity has recovered to a level above that of the beginning of 1958. July activity shows below that of June due largely to June steel inventory buying in anticipation of a July price increase. This price increase was delayed, however, until early August.

Week Ending	Barron's Index
January 4	90.0
May 3	80.5
May 10	81.1
May 17	82.9
May 24	84.8
May 31	85.8
June 7	89.1
June 14	90.1
June 21	90.7
June 28	89.1
July 5	84.9
July 12	84.1
July 19	86.4
July 26	87.7
August 2	88.6
August 9	89.0
August 16	89.8
August 23	90.4
August 30	90.9

DR. HOAGLAND is Associate Professor of Business Administration, MSU.

rather than its source in the production process. In describing "the consumer market for each and all categories of products and services," the study should prove valuable to all persons making marketing decisions and to all others interested in how the American family spends its dollar.

POLLOCK, FREDERICK. *Automation: A Study of Its Economic and Social Consequences*. New York, Praeger, 1957.

Instead of stressing the technical aspects of automation, the author deals mainly with the economic and social problems that automation will bring. In presenting both optimistic and pessimistic views of the impact automation will

have on the world's economy, the book makes clear that automation is more than increasing production via the use of machines; that it is imperative for increased emphasis to be placed on the economic and sociological aspects of automation.

FORTUNE MAGAZINE. *The Art of Success*. New York, Time, Inc., 1956.

This book has very interesting accounts of some of America's leading businessmen. Among the men included are Harlow Curtice, Clarence Randall, Clint Murchison, and the Rockefeller brothers. This book proves that this country is still a land of opportunity for those who desire to move ahead.

W.S.S.

## *Bull Moose and Hound's Teeth*

CLICHE EXPERTS recently had a field day over an embarrassing Washington political contretemps involving vicuña coats, hotel bills, oriental rugs and other elements of American public life. As a description of the moral righteousness or unrighteousness of a certain man close to the President, both sides in the hassle trotted out that venerable phrase, "clean as a hound's tooth". Reporters traced the simile back to Adlai Stevenson, who was quoting from Eisenhower's 1952 campaign promise of clean government. Who has a political memory long enough to remember Theodore Roosevelt's use of the phrase in his own campaigning?

He was a man of great pungency of speech, and his background of life on the Western plains may have given him this phrase at first hand. It derives from the herders, who are ever on the watch for evidence that a dog has been killing sheep. A hound suspected of this practice has his mouth examined for telltale bits of wool. A clean-toothed hound is as far above suspicion as a political candidate asseverating his party's rectitude.

# Current Business Conditions

BY JOHN H. HOAGLAND

An impressive business recovery is occurring. July and August business conditions improved over the increased activity of May and June. If the automobile labor disputes can be settled without too much strike activity business conditions for the fall of 1958 should continue to climb noticeably from the recent recession low of April. This relatively sharp recovery has been stimulated by emergencies in the Middle East and China areas, increased government spending, more inflation, few major strikes, and a change from inventory liquidation to inventory accumulation. Even with automobile production persisting at a very low level, total business activity has improved. If the planned production of 1959 model cars can be achieved reasonably soon, it will provide a further stimulus.

The only foreseeable event which can halt the business recovery during autumn is a prolonged automobile strike, and that is not expected to occur. Inflation in labor and material costs, plus increased competition at lower profit margins, are factors which can eventually slow the recovery.

## PRODUCTION ACTIVITIES

*Steel Production* is above that of the first of the year. When 1959 automobile production materializes this should rise further.

Week Ending	Index 1947-49=100	% of Rated Capacity
January 4	93.4	55.6
July 5	85.7	54.1
July 12	89.8	53.4
July 19	92.2	54.9
July 26	96.2	57.3
August 2	97.2	57.8
August 9	98.7	58.8
August 16	101.6	60.5
August 23	105.2	62.2
August 30	106.8	63.6

*Industrial Production*, as measured by the Federal Reserve Board's seasonally adjusted index, gives a good indication of the recovery. From August 1957 through April 1958 this index dropped 19 points. By the end of July it had recovered 7 points.

Month	Index	Month	Index
August '57	145	February '58	130
September	144	March	128
October	141	April	126
November	139	May	128
December	136	June	131
January '58	133	July	133

*Barron's Weekly Index* of physical volume of business, adjusted for seasonal and long-term growth trends, indicates that activity has recovered to a level above that of the beginning of 1958. July activity shows below that of June due largely to June steel inventory buying in anticipation of a July price increase. This price increase was delayed, however, until early August.

Week Ending	Barron's Index
January 4	90.0
May 3	80.5
May 10	81.1
May 17	82.9
May 24	84.8
May 31	85.8
June 7	89.1
June 14	90.1
June 21	90.7
June 28	89.1
July 5	84.9
July 12	84.1
July 19	86.4
July 26	87.7
August 2	88.6
August 9	89.0
August 16	89.8
August 23	90.4
August 30	90.9

DR. HOAGLAND is Associate Professor of Business Administration, MSU.

*Automobile Production* is still one of the hardest-hit segments of the business community. The 1958 models met consumer resistance and now, at this writing, the production of 1959 models is being harassed by many wildcat strikes. For the first nine months of 1958 automobile production trailed that of 1957 by almost 40%. The month of August had the lowest production since 1941. When the labor disputes are settled, production of 1959 cars should pick up considerably, for the distribution pipelines will need to be filled.

<i>Week Ending</i>	<i>1958</i>	<i>1957</i>	<i>% Change From 1957</i>
July 5	35,335	111,836	-68.4
July 12	73,062	117,206	-37.7
July 19	85,249	119,860	-28.9
July 26	85,519	119,323	-28.3
August 2	62,846	118,847	-47.1
August 9	65,612	117,592	-44.2
August 16	59,677	123,120	-51.5
August 23	25,680	118,745	-78.4
August 30	17,019	90,704	-81.2

*Railroad Carloadings* still trail those of a year ago but indicate definite signs of improvement.

<i>Week Ending</i>	<i>% Change from Year Ago</i>	<i>% Change from Preceding Week</i>
July 5	-14.5	-27.0
July 12	-29.1	+ 7.3
July 19	-21.7	+18.5
July 26	-16.0	+ 4.4
August 2	-17.5	+ 2.4
August 9	-16.5	- 0.6
August 16	-16.6	+ 1.2
August 23	-16.5	+ 1.2
August 30	-13.4	+ 1.9

*Electrical Output* for the nation has begun to rise above that of a year ago. Even the important central industrial district is climbing out of its months of negative comparison.

<i>Week Ending</i>	<i>National % Change from Year Ago</i>	<i>Central Industrial % Change from Year Ago</i>
July 5	+1.4	+3.5
July 12	-0.9	-1.6
July 19	-0.4	-2.6
July 26	+1.2	-3.0
August 2	+1.2	-3.1
August 9	+5.3	+2.7
August 16	+3.6	+1.7
August 23	+3.9	+1.1
August 30	+1.0	-1.3

*Construction Activity*, aided by easier money and government supports, increased noticeably during July and August. F. W. Dodge Corp. reported construction contracts for July to be 24% above those of a year ago. The Federal Government estimates predict a further advance for August. Housing, highways, public buildings, and airports have all registered gains above a year ago, but industrial and commercial buildings are still behind.

## CONSUMPTION ACTIVITIES

*Department Store Sales*, in recent weeks, have increased above those of a year ago. For the year to date they are down only 1% below 1957. Consumers have continued sizable purchases of non-durable items, and thus have helped speed the recession recovery.

<i>Week Ending</i>	<i>% Change from 1957</i>	<i>Week Ending</i>	<i>% Change from 1957</i>
July 5	+1	August 2	+3
July 12	+5	August 9	+1
July 19	+2	August 16	+2
July 26	+3	August 23	+2
		August 30	+3

*Chain Store Sales* for the first seven months are 3.5% ahead of 1957. For July almost all types of stores increased their volume over July 1957. By types of stores this activity was as follows:

<i>Type of Store</i>	<i>Percent Change from Year Earlier</i>	
	<i>July, 1958</i>	<i>7 Months, 1958</i>
Variety	+4.4	+1.8
Grocery	+6.5	+8.2
Mail Order	+2.1	-0.7
Women's Wear	0.0	-2.2
Men's Wear	-1.9	-8.7
Shoe	+7.1	+4.3
Auto Accessory	+4.5	+3.7
Junior Dept. Store	+5.6	-0.1
Drugs	+8.8	+9.4
Furniture	-3.2	-14.7
Total	+4.7	+3.5

*Paperboard* new orders continue their recent favorable comparison to a year ago. Backlog, by the same comparison, still trails slightly.

<i>Week Ending</i>	<i>New Orders (Thousand Tons)</i>		<i>Order Backlog</i>	
	<i>1958</i>	<i>1957</i>	<i>1958</i>	<i>1957</i>
July 5	229.2	238.9	391.5	446.4
July 14	191.4	199.2	447.2	464.7
July 21	262.0	249.9	447.2	464.7
July 28	266.9	246.9	427.9	433.6
August 2	339.8	359.2	465.5	506.5
August 9	298.4	272.1	471.7	504.1
August 16	261.6	260.0	439.2	477.1
August 23	275.0	263.4	419.4	447.3
August 30	299.4	265.6	407.3	418.3

*Automobile Sales* for 1958 lag about 30% behind those of 1957. Total sales of the 1958 cars are expected to be about 4.3 million units, as compared to 6.2 million for the 1957 cars. The slow pace of sales has been ahead of the even slower rate of production. Thus car inventories receded from 900,000 units in February to about 500,000 units at the end of August. This may drop another 150,000 during September. One closely observed feature of the business recovery will be the consumer acceptance of the 1959 models.

*Machine Tool Orders* for the year have followed an erratic pattern. A slight rise for the first three months was followed by a decline in April and May, a

7% rise in June and an 8% decline in July. Total orders for the first seven months of 1958 have trailed 1957 by 57%.

*Inventories* of manufacturers, by the latest government figures, show liquidation continuing at a slower pace through July. It is estimated, however, that this turned to accumulation during August.

Compared to a year ago, inventories, sales, new orders, and unfilled orders are all down noticeably. Compared to the preceding month, however, the showings are favorable.

	(Billion Dollars) Seasonally Adjusted			July % Change From	
	May	June	July	Year Ago	Month Ago
<i>Durable Goods</i>					
Sales	11.6	12.1	12.4	-15	+1
Inventories	29.0	28.5	28.3	-10	-1
New Orders	11.4	12.3	12.4	-5	+1
Unfilled Orders	n.a.	n.a.	n.a.	-22	n.a.
<i>Non-Durable Goods</i>					
Sales	13.6	13.7	13.9	-3	+1
Inventories	21.9	21.7	21.5	-4	-1
New Orders	13.6	13.5	13.9	-2	+3
Unfilled Orders	n.a.	n.a.	n.a.	-10	n.a.

*Prices* again struck a record high with the Bureau of Labor Statistics Index of Consumer Prices reaching 123.9% for July. The threat of inflation is still serious. Both the BLS Wholesale Price Index and Spot Commodity Price index rose in July then declined in August.

Week Ending	Wholesale Index	Commodity Index
July 5	119.2	86.1
July 12	119.2	85.8
July 19	119.3	86.5
July 26	119.3	87.1
August 2	119.4	87.3
August 9	119.2	87.4
August 16	119.0	86.9
August 23	118.8	86.5
August 30	118.7	86.3

### SUMMARY

This is the sixth and last of a series of bi-monthly articles to be written by this author. As a summary and review, here are pertinent statements made in "Current Business Conditions" during this series. Readers can apply the test of time.

November '57 "The early stages of a business recession have already occurred."

January '58 "The most serious business recession since World War II continues, and business conditions are progressively deteriorating."

March '58 "The current business recession continues its downward course, with indications that further declines will occur. Possibly the steepest rates of decline have been passed."

May '58 "The 'bottoming-out' stage of the current business recession has started."

July '58 "A major business recovery should be under way this fall."

August '58 "An impressive business recovery is occurring."

## MICHIGAN BUSINESS STATISTICS

## BANK DEBITS

City	Bank Debits (Thousands of Dollars)		Percent Change from Previous Year	
	June 1958	July 1958	June 1958	July 1958
Adrian	27,370	28,136	-10.2	-6.2
Battle Creek	77,897	82,475	+1.3	+3.4
Bay City	56,256	55,560	+1.7	-2.6
Detroit	5,816,028	5,589,930	-7.1	-12.8
Flint	157,124	145,105	+2.3	-9.5
Grand Rapids	325,332	321,884	-0.5	-1.9
Jackson	85,579	88,063	-3.6	-11.5
Kalamazoo	165,317	153,475	+6.0	+0.6
Lansing	141,884	150,197	-9.2	-4.4
Muskegon	86,533	81,150	-8.1	-11.9
Port Huron	39,946	39,341	-4.4	-11.0
Saginaw	119,573	121,115	-4.8	-4.4
Escanaba	12,912	12,621	+5.6	-5.8
Marquette	13,059	13,791	-4.5	-10.2
Sault Ste. Marie	11,816	12,671	+11.6	+5.3

Sources: Federal Reserve Banks of Chicago and Minneapolis and Board of Governors of the Federal Reserve System.

## DEPARTMENT STORE SALES

## July 1958

	Percent Change from		Percent Change 1958 vs. 1957
	June 1958	July 1957	
Battle Creek	-5	+1	-2
Detroit*	-12	-4	-13
Flint*	-9	0	-11
Grand Rapids*	-10	-8	-7
Jackson	-4	-10	-10
Kalamazoo*	-8	-4	-8
Lansing	-7	0	-5
Muskegon	-5	-9	-11
Port Huron	-9	+5	-3
Saginaw*	-5	-1	-9

\*Metropolitan Areas

Source: Federal Reserve Bank of Chicago.

TURNOVER OF DEMAND DEPOSIT ACCOUNTS  
BASED ON 12 MICHIGAN LOWER PENINSULA CITIES

(Bank Debits ÷ End of Month Demand Deposits)

June '58	July '58	Percent Change from Previous Year	
		June '58	July '58
30.6	29.4	-2.6	-8.3

Source: Federal Reserve Bank of Chicago.

## MOTOR VEHICLE FACTORY SALES FROM PLANTS

	Factory Sales		Percent Change from Previous Year	
	June	July	June	July
Passenger Cars	342,228		—31.0	
Motor Trucks	70,760		—25.0	
Motor Coaches	77		—80.2	

Source: Automobile Manufacturers Association.

## MICHIGAN BUSINESS INDEXES

(1947-49 = 100)

INDEX OF BUSINESS ACTIVITY<sup>1</sup>

				Percentage Change Latest Month From	
	July 1958	June 1958	July 1957	Previous Month 1958	Same Month 1957
Michigan	167.1	171.3	182.7	—2.4	—8.5
Detroit	168.9	173.8	186.7	—2.8	—9.5
Michigan Excluding Detroit	160.2	159.9	165.4	+ .2	—3.1

INDEX OF BANK DEBITS<sup>2</sup>

Michigan	199.2	204.0	215.9	—2.4	—7.6
Detroit	201.3	207.1	220.7	—2.8	—8.8
Michigan Excluding Detroit	191.0	190.4	195.5	+ .3	—2.3

INDEX OF RETAIL SALES<sup>3</sup>

Michigan	151.5	152.6	167.3	— .7	— 9.4
Bay City	154.7	162.1	161.8	—4.6	— 4.4
Detroit	147.8	148.3	167.4	— .3	—11.7
Flint	184.8	187.9	196.0	—1.6	— 5.7
Grand Rapids	150.0	151.2	164.0	— .8	— 8.5
Jackson	147.9	145.0	159.0	+2.0	— 7.0
Kalamazoo	166.2	168.1	164.8	—1.1	+ .8
Lansing	156.8	156.4	165.6	+ .3	— 5.3
Saginaw	152.6	161.0	174.8	—5.2	—12.7

<sup>1</sup>Bank Debits adjusted for seasonality and price change.

<sup>2</sup>Seasonally adjusted; basic data from Federal Reserve Banks of Chicago and Minneapolis.

<sup>3</sup>Seasonally adjusted; basic data from Michigan Department of Revenue.

